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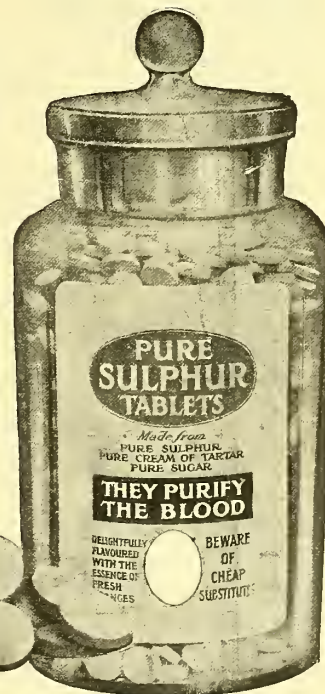
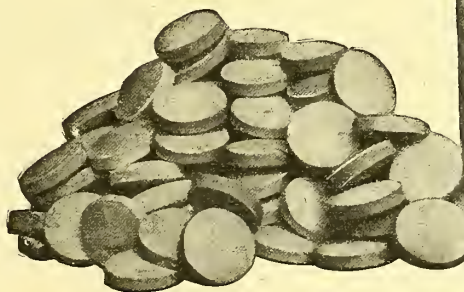
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Maw's Page



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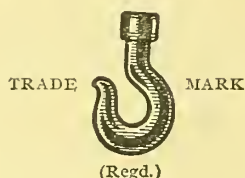
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- No. 2a Cabinet** for Works
with more than 50 persons
(with no Ambulance Room) 49/-

All prices shown include No. 1 Eyedrop.

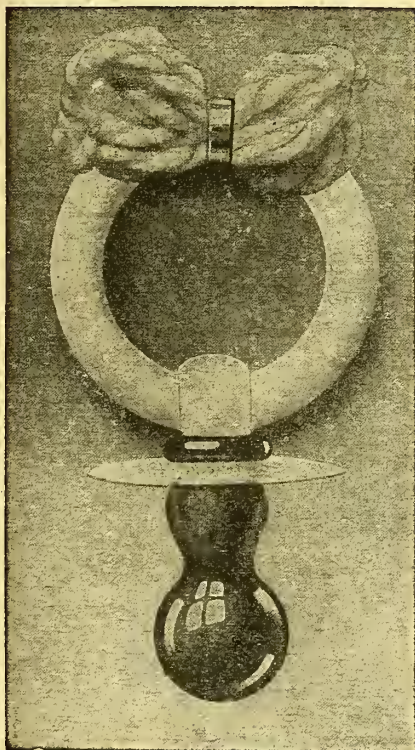


LIBERAL DISCOUNT TO THE TRADE

CATALOGUE ON APPLICATION TO:

SOUTHALL BROS. & BARCLAY, LTD.
19, 20 & 21 Lower Priory, BIRMINGHAM

SOOTHERS



New times— —new methods

This is a hygienic age; we and you have had as big a share as anyone in bringing it about. Take soothers for instance; the most modern and the safest method of selling these is in a carton, or otherwise protected from outside contamination, dust or grime. But there's a commercial side to it; there is no spoiled stock, handling is easier, and sales are bigger. With every 6 dozen of the smaller teats listed, or 3 dozen of the larger, we include a counter display box which keeps stock in perfect condition.

No. 22A, double-bulbed teat, bone shield and ring with silk tie-on, each in decorated carton, 3 dozen in counter display outer, per dozen 4/6.

No. 10, Wood mount, bone shield, ribbed teat	.. .. .	per gross	14/-
No. 12, Small Bone Ring, transparent teat, ribbed teat	.. .. .	"	18/-
No. 12a, Each in a decorated Carton, 6 doz. in an outer	.. .. .	"	21/-
No. 14, Bone knob and shield, "Baby's First"	.. .. .	"	27/-
No. 15, Small bone end mount and bone shield	.. .. .	per doz.	2/-
No. 15a, Long bone end, ribbed teat	.. .. .	"	2/6
No. 15b, Large bone end, thick ribbed teat	.. .. .	"	3/-
No. 15c, " " extra thick ribbed teat	.. .. .	"	3/6
No. 16, Flat Bone Mount	.. .. .	"	3/6
No. 20, Griptight Hygienic, forms a soft cushion for baby's lips, secure aluminium fittings— each in glassine paper envelope, 3 doz. in a display box	.. .. .	per doz.	3/-
No. 21, Bone ring mount, ribbed teat	.. .. .	"	2/4
No. 21a, Larger, bone ring mount, ribbed teat	.. .. .	"	4/-
No. 19a, All rubber ring and pad, large	.. .. .	"	2/6
No. 32, All rubber ring, with 2 teats	.. .. .	"	5/-
No. 33, " ring, with teat and pad	.. .. .	"	4/3
No. 30, " small ring and teat	.. .. .	"	3/-
No. 30a, " Medium, patent ring teat and shield	.. .. .	"	3/9
No. 30b, " Large " " " "	.. .. .	"	4/6
No. 30c, " Extra large ring, teat, and shield	.. .. .	"	3/9
No. 30d, " as above, but extra heavy	.. .. .	"	5/-

AYRTON, SAUNDERS & CO., LTD.
34 Hanover Street



LIVERPOOL

ARMOUR AND COMPANY

LIMITED LONDON

The name "GLANOID" has been registered by us for tablets of our manufacture containing glandular preparations. Prescriptions bearing this word must be dispensed with products of the Armour Laboratory.



Headquarters for :

Endocrines Digestive Ferments

Ligatures, Sterile and Unsterile

Specialities :—

Glycerin Ext. of Red Bone Marrow

Pituitary Liquid Beef Juice

Suprarenalin

ARMOUR AND COMPANY
LIMITED

QUEEN'S HOUSE

KINGSWAY

LONDON, W.C.2

The Success of "Vapex"

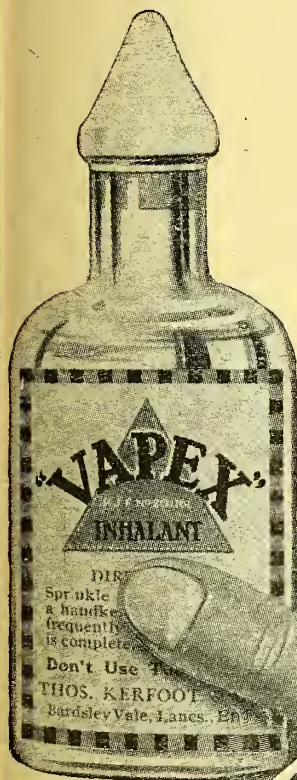
as a prophylactic against Influenza and in the cure of the common "Cold" is now an established fact; our sales charts prove it in the bulk and the experience of retail pharmacists confirms it in detail.

What "Vapex" is.

"Vapex" is a "Handkerchief" Cold Cure that possesses the remarkable property of gaining in strength and effectiveness on exposure to the air, thus making it most economical in use. Its odour is free from any suggestion of eucalyptus or pine, and is, in fact, as pleasant as a perfume.

Free Leaflets.

A popularly worded leaflet with the intriguing title "The Secret of No-Cold Smith" has been prepared to expound the virtues of "Vapex," and copies will be sent free to all chemists ordering a dozen bottles of "Vapex" and upwards. With orders for 3 doz. 2/- bottles of "Vapex" (or their equivalent) we print customer's name and address on the leaflet free of charge.



New Size.

"Vapex" has recently been made even more popular by the introduction of a very economical 3/- size and by the adoption of a new and improved display outer for the 2/- size.

TRADE PRICES
(stamped). P.A.T.A.

2/- size, 18/6 doz.

3/- size, 27/6 doz.

Both sizes packed in patent show outers of six or twelve bottles.

THOMAS KERFOOT & CO LTD
BARDSLEY VALE, LANCASHIRE,
& Bardsley House, London, N.1
ESTABLISHED 1797.

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Are
YOU Stocking?

The DAVOZE HEALTH CASQUET



Being made of alabaster in varied colours, and very beautiful in design, they make a most attractive display.

Davoze Health Casquets are thoroughly reliable and entirely supersede methods of disinfecting rooms and relieving pulmonary complaints which necessitated the burning of substances in trays or pans.

Our big Advertising Campaign will create a wide demand which you should be ready to supply.

Davoze Health Casquets will introduce the best kind of customers and allow you a most generous percentage of profit on every sale effected.

Full particulars from the Sole Manufacturers:
The DAVOZE OZONATOR CO.
Billiter Buildings, Billiter Street, E.C.3

PRICE'S GIFT of LAVENDER SACHETS

WE have the pleasure to announce that until further notice, we are enclosing with each 6 and 12 cake box (toilet and bath size) of

Price's Renowned Old English Lavender Soap



a handsome perfumed sachet filled with the finest lavender flowers.

This charming gift is certain to appeal to the public and stimulate the demand for PRICE'S RENOWNED OLDENGLISH LAVENDER SOAP—the soap in the neat wooden boxes. Your enquiries will be appreciated.

PRICE'S SOAP CO. LTD.,
BLACKFRIARS :: E.C.4.

Works :
GREENWICH.



Attractive Window Displays

in colours, of the above carton, representing the well-known

WOOLLEY'S SANITARY ROSE POWDER

are provided free for your counter or window.

For 40 years a popular favourite and ready seller.

Strongly recommended by doctors for its anti-septic qualities and suitability for the most delicate skins.

There are many toilet powders, but only one
SANITARY ROSE POWDER, made by

JAMES WOOLLEY, SONS & CO. LTD.
MANCHESTER.

TRADE



MARK

ESSENTIAL OILS

BERGAMOT
LAVENDERGERANIUM
NEROLI

OTTO OF ROSE

Cinnamon
Cloves
Eucalyptus
Lemon
Lemongrass
PetitgrainPortugal
Peppermint
Rosemary
Santal
Thyme
Verbena, etc.

FLORAL OILS

Highly concentrated oils, manufactured direct from the flowers by our special "enfleurage" process. Can be diluted down with Mineral Oil to any strength for the preparation of Brilliantines, IN ALL ODOURS.

FLORAL WATERS

ROSE ELDER FLOWER
ORANGE FLOWER

Distilled direct from the flowers.

PERFUMES of every kind

BULK or BOTTLED

All our Perfumes are made with natural floral bases, which are manufactured from the fresh flowers grown on our own plantations.

Can be supplied in all degrees of concentration and for all purposes.

SPURWAY ET CIE, LTD.

89 Great Eastern Street,
LONDON :: :: E.C.2.

Factories & Distilleries :

CANNES-GRASSE, RIVIERA.
Technical Laboratories : PARIS.LEIPSIC NEW YORK
KINGSTON (ONTARIO)Telegrams - "NEROLI, LONDON."
Telephone - BISHOPSGATE 1372.

Established 1795.

LAUTIER FILS

Works : GRASSE (France) & BEYRU (Syria).

Essential Oils ——— Synthetics.
All Raw Materials for Perfumery.Absinth
Almond, bitter,
Angelica (S.A.P.)
Basil
Bay
Bergamot
Bois de Rose femelle
Cajuput
Caraway
Cinnamon
Cloves
Copaiba
Costus
Cubeb
Fennei
Geranium
Honey
HyssopLaurel
Lavender
Lemon
Mace
Melissa
Neroli blg and Syn.
Orange
Otto de Rose
Patchouli
Peppermint
Rosemary
Rue
Sandalwood
Spike Lavender
Tansy
Tarragon
Thyme
VetivertOlive, Peach Kernel, Sweet Almond Oils
Floral Waters.

Wholesale and Export only.

LAUTIER FILS, Ltd., 4 Denman St., London Bdg., S.E.1
Tel. Add. : "LAUTIER, PHONE LONDON." Telephone. HOPE 2819.

JAKSON'S PEPPERMINT, LAVENDER & CAMOMILE OILS are the BEST.

Produced and Prepared by
THE LARGEST GROWERS & DISTILLERS
IN ENGLAND.Distillery :
J. JAKSON & CO. (Mitcham Rd., 1921), LTD.
Mitcham Road, WEST CROYDON.AGENTS for the U.K. :
F. NEWBERRY & SONS, LTD.
27 & 28 Charterhouse Square, London, E.C.1

BRITISH EMPIRE EXHIBITION

ENORMOUS interest is being shown in the forthcoming British Empire Exhibition, which is to be held at Wembley from April to October. Every homeward bound vessel from the Colonies has a full passenger list, and it has been computed that 30,000,000 visitors will pass through the turnstiles during the period of the Exhibition.

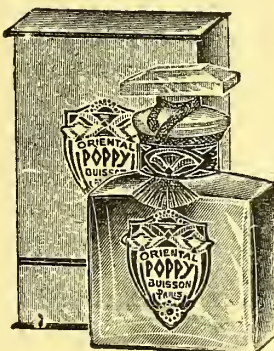
*Our **PERFUMERY EXHIBIT** will be at **STAND A 9** in the "Chemical Industries, Dyestuffs and Perfumery Section" in the North-East Corner of the Palace of Industry.*

ORIENTAL POPPY BUISSON

An Eastern Perfume of wonderful fragrance and great lasting power, packed in dainty bottles and cartons.

Packed in three sizes, as illustration, also in wickered globe-shaped bottles, flasks and sample tubes.

BATH SALTS
BRILLANTINE
PERFUMED CARDS
ABSOLUTE
PERFUME
HAIR FOOD



"Buisson" Perfumes are good products; write for a small testing sample of Oriental Poppy, and judge for yourself.

Prices and terms on application.

BUISSON FRÈRES

LONDON

Sole Proprietors:

W. J. BUSH & CO. Ltd., Ash Grove, Hackney, London, E.8

Sole Scottish Agents for Articles of Perfumery:

Messrs. MUNRO, M'LAREN & SUTHERLAND, GLASGOW.

Nuctone

for GREY HAIR

A NEW SIZE

Retails **3/9** a
at bottle

WE have produced this new size to meet the growing demand of NUCTONE users requiring a smaller quantity for re-touching purposes. Trade Terms 32/- per dozen. Order your supplies now.

NUCTONE for dark and medium hair.

NUCTONE ECLAIRE for fair and auburn shades.

NUCTONE CONCENTRE for Gentlemen's hair.

Large size ... retail price 6/6
Trade Terms 52/- per dozen.

NUCTONE stands alone in a market with no real competitor. Grey-haired men and women who would never bring themselves to use ordinary instantaneous hair dyes will welcome the gradual colour-restoring treatment made possible by NUCTONE; and thereby new sales possibilities are opened up.

NUCTONE can be recommended with absolute confidence in its safety and dependability, with the certainty that your customers will be satisfied with the results and will return to you again as soon as growth of new hair makes further application necessary.

Showcards and explanatory booklets for free distribution are furnished on request.

THE NUCTONE GUARANTEE.

NUCTONE is guaranteed entirely free from any combination of lead and sulphur, and contains no ingredients that can injure the hair. There is no fear of the after-development of pink or green shades, and colour restored by NUCTONE is unaffected by the action of either sea air or sea water.

James Stewart, Ltd.
80, New Bond Street, London, W.1.

Manufacturers:
STEWART, GOODALL & DUNLOP LTD.
4 Dering Street, London, W.1.

58

DEARBORN (1923) LTD.

37 Gray's Inn Road,
LONDON, W.C.1.

Toilet Specialties.

	Price per doz. to Retailer	Selling Price P.A.T.A.
PILENTA SOAP ... <small>A complexion soap.</small>	10/-	1/-
PROLACTUM ... <small>For the lips.</small>	10/-	1/-
PARSIDIUM JELLY ... <small>For wrinkles.</small>	10/-	1/-
ALLACITE OF ORANGE BLOSSOM ...	22/6	2/6
<small>A dressing cream.</small>		
BORANIUM ...	22/6	2/6
<small>A hair tonic.</small>		
CLEMINITE ...	22/6	2/6
<small>For a face lotion</small>		
COLLIANDUM ...	22/6	2/6
<small>For a face tint.</small>		
PERGOL ...	22/6	2/6
<small>A deodorant.</small>		
TEKKO PASTE ...	22/6	2/6
<small>Camphor cream.</small>		
STALLAX ...	22/6	2/6
<small>For a shampoo.</small>		
JETTALINE ...	31/6	3/6
<small>For clearing the skin.</small>		
PHEMINOL ...	36/-	4/-
<small>A depilatory.</small>		
MENNALINE ...	36/-	4/-
<small>For the eyelashes.</small>		
MERCOLIZED WAX ...	31/6	3/6
<small>A face cream.</small>		
STYMOL ...	36/-	4/-
<small>For oily complexions and blackheads.</small>		
SILMERINE ...	22/6	2/6
<small>Hair-cutting fluid.</small>		
BARSYDE ...	22/6	2/6
<small>Dandruff eradicator.</small>		
TAMMALITE ...	22/6	2/6
<small>For grey and faded hair.</small>		
LIQUID PERGOL ...	31/6	3/6
<small>To check excessive perspiration locally.</small>		
BICROLIUM ...	22/6	2/6
<small>For whitening the hands.</small>		
COCONOIDS ...	31/6	3/6
<small>For figure development.</small>		

The Products of

Messrs. PARKER, BELMONT & CO.

CLYNOL BERRIES	{ 36/-	4/-
<small>For obesity.</small>	{ 58/6	6/6
SOFT PALERIUM...	45/-	5/-
<small>For wrinkles.</small>		
LIQUID NAIL POLISH ...	10/-	1/-
<small>Brilliant and lasting.</small>		

Stocked by ALL Wholesale Houses.

COLONIAL DEPÔTS AND AGNCIES.

Australia: ALL WHOLESALE, & DEARBORN (Australia), Ltd., Grace House, Clarence Street, Sydney.
South Africa: LENNON Ltd., Cape Town, etc.
SIVE BROS. & KARNOVSKY, Johannesburg.
India: FRAMJEE & SON, Bombay.
A. L. CHOUDRY, Calcutta.
New Zealand: SHARLAND & CO., Auckland & Wellington.
South America: DEARBORN (South America) Ltd., Calla Salta 264, Buenos Aires.
Strait Settlements & Federated Malay States: MEDICAL HALL, Ltd., Singapore.

WILSON'S CO-RE-GA (POWDERED)

Comfort Powder Holds False Teeth Firmly in the Mouth

PREVENTS SORE GUMS.

Dentists everywhere are now prescribing and sending patients to Chemists for CO-RE-GA. Sales are increasing tremendously on account of this extensive and intensive dental propaganda work. As a Dental Plate Fixative CO-RE-GA stands alone for dependability and long-lasting adhesive properties.

CO-RE-GA is a ready repeater and sells anywhere, whilst profits are not only good, but amply protected. Add to your personal prestige by handling CO-RE-GA.

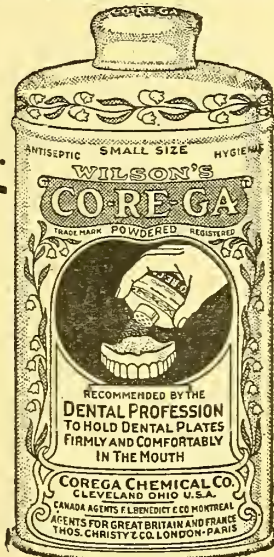
LIKE THE DENTIST—RECOMMEND IT WITH CONFIDENCE.

IN METAL CANISTERS:

(Small)	1/6 P.A.T.A.	-	-	-	-	Doz. 12/-
(Medium)	2/6	"	-	-	-	" 20/-
(Large)	4/3	"	-	-	-	" 34/-

ORDER FROM YOUR WHOLESALER—or direct from

Thos. Christy & Co. (DISTRIBUTORS),
4/12 Old Swan Lane - - - London, E.C.A.
SAMPLES MAILED FREE ON REQUEST.



GIVES
A GOOD
PROFIT

ENSURES
LASTING
BUSINESS

NEARLY 100 YEARS' REPUTATION FOR THE HIGHEST-CLASS PERFUMERY OF WHICH WE ARE INTENSELY PROUD.

POUDRE POUR LE TEINT.
Serie C.
"FROLIC," "VASHTI."



Issued in five tints:—Blanche, Rachel,
Rachel Fonce, Chair and Rosee.
Retail Price 1/6 per Box.

Solid Powders on porcelain plaques, in
boxes fitted with puffs, and in same tints.
1/- each.

Increase your reputation

by selling PIESSE & LUBIN'S

"DISTINCTLY DIFFERENT"

PERFUMES AND TOILET GOODS.

EXQUISITE. DISTINCT.

THEY HAVE A WORLD-WIDE REPUTATION
AND STRONGLY APPEAL TO THE PUBLIC.
ATTRACTIVELY PACKED. THEY SHOW YOU A

PROFIT OF 50% ON COST.

PIESSE & LUBIN is a name that signifies highest
grade quality and dignity in packing. A name that
inspires confidence in PERFUMERY.

BRILLANTINE DE LUXE.



In bottles specially constructed to stand firm
on dressing table. Supplied either separable
or inseparable, in a large range of perfumes.
2 oz. bottles retail 1/6 4 oz. bottles retail 2/9

VISIT OUR
SHOWROOMS:

244

HIGH HOLBORN,
LONDON, W.C. 1.

Piesse & Lubin Ltd.
Parfumeurs

Write and ask for Price

List, or Telephone

HOLBORN 4917.

THE alert Chemist has long since realised
the advantages to be derived from handling
"LITTO." He knows that "LITTO" stands
or falls on its merits, that the quality is uniform,
and that he is safe in recommending it.

"LITTO" is the finest preparation yet produced
for the hair and faithfully carries out the claims
made for it.

Dissatisfied users of "LITTO" are almost
unknown.

So sure are we that "LITTO" will stop hair from
falling and promote a new growth that we give a
guarantee with every bottle, stating that should
it fail to do so, the price will be refunded.

This is certainly an innovation so far as hair
tonics are concerned, and quickly gets the cus-
tomers' confidence.

If you are already selling "LITTO," keep same
to front of your window—it pays!



If you are not yet co-
operating with us, let us
send you our illustrated
price list, and remember
"LITTO" shows an ex-
ceptionally big profit.

On the
P.A.T.A.
LIST

Litto Laboratories, 2 Newington Green, London, N.1

We are moving!

On and after **February 15**, Bush
House, London's most magnifi-
cent office building, will be the
home of **The Merkhams Trading
Co. Ltd.**, the headquarters for

Artifex
SOFT ALL RUBBER CURLERS.

MERKHAM TRADING COMPANY LTD.
BUSH HOUSE, ALDWYCH
W.C. 2.

Telephone No.: City 3751.



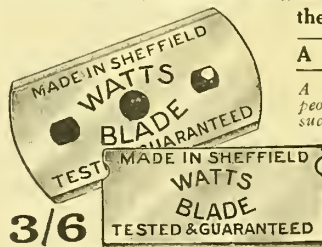
Assist British industry by recommending the
'WATTS' Sheffield-made Safety Razor Blade,
the blade of super-keenness.

A counter display will help.

A user writes: "Can't understand
people buying foreign blades when
such as yours are obtainable."

12 Perfect Blades
in Every Dozen.

For Gillette-Type and
Autostrop-type holders



3/6

per doz.
allowing
50% PROFIT
on cost for
the dealer.

Sole Manufacturers: **JOHN WATTS,**
Dept. 3, LAMBERT WORKS, SHEFFIELD.
London: 24, REDCROSS ST., E.C.1.
Established over 150 years.

If a man preach a better sermon,
If a man write a better book,
If a man make a better mousetrap,
The world will make a beaten track to his house,
Even though it be in the woods.—EMERSON.

'PLAIMAR'

(REGISTERED.)

SANDALWOOD OIL

ALCOHOLS as SANTALOL 90%—94%

Profiting by the mistakes of the past, many months were spent in developing and perfecting the delicate aroma of the West Australian Sandalwood, before "Plaimar" was offered. The first shipment was made in June 1921—to-day it is famous and sought after.

EXCELLENT IN SOLUBILITY
HIGH FIXATIVE POWER
SWEET FRAGRANCE

*This oil has been used
for some years by
Government Hospitals
in Australia.*

*Samples, Prices and Stocks
available from
PLAISTOWE & CO., LTD.
King's Cross, London, N.1*

DODGE & OLCOTT CO., 20 MARK LANE,
LONDON, E.C.3.

THE "D & O" BRAND
is the "Standard of Quality" for

OILS of BAY, CEDARWOOD, PATCHOULI, PEPPERMINT,
SASSAFRAS, ETC.

BALSAMS of Copaiba, Peru, Tolu.
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Telegrams : "Coate, Axminster."

COATE & CO. (Axminster) Ltd.
The London Brush Works, Axminster, Devon.

Estab. 1847.

Manufacturers of Super British Brushes

Our Special "PROPHYLACTIC" Tooth Brushes, in Hard, Medium, Soft, and Yellow Hair, also Ex.H., in 3 row or 4 row, in Cartons, with customer's name and address, free for orders of 1 gross. Every Brush Guaranteed. British made throughout by British Labour.

SEND FOR OUR PRESENT LIST OF PRICES.

CAPSOL DYES

*for all
Household Dyeing*



CAPSOL DYES for all materials

"CAPSOL WONDER" No Boiling
Leaves lace insertion white

"CAPSOL DIPPIT" No Boiling
The ONLY cold water dye from start to finish

CAPSOL DYES in every shade
Time to seconds. No Boiling

Showcards &c. supplied.

Address all enquiries to Works.

CAPSOL DYES, LTD.

Sep Avenue, Blackpool.

SAY "99"

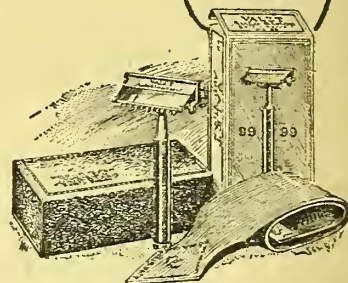
2/6 RETAIL

is the price of this latest VALET Model, consisting of RAZOR, STROP and BLADE.

PRICES.

2 gross Lots, 35%
6 doz. Lots, 33%
3 doz. Lots, 30%
Smaller Lots, 25%
Subject 2 1/2% Disc.

Supplies may be rationed, so order early.



TWELVE RAZORS (as illustrated) sent FREE with every 6 Doz. EVER-READY BLADES for 16/- 1 gross Blades & 24 Razors 31/- for - - - Limited Supplies

GILLETTE U.S. BLADES

in stock

Write for Price List.

Beware of unscrupulous Vendors of Re-sharpened Blades.

STAMBOIS
34 CALL LANE
LEEDS.



The "FORT" Brand PROPHYLACTIC TOOTH BRUSH

Each Brush packed in an Orange Carton, sealed at Factory, ensures Brush reaching customer in a clean and wholesome condition.

— In Three Sizes. —

WHOLESALE—

Full Size, 16/- doz.

Ladies' Size, 15/6 ..

Children's, 11/6 ..

RETAIL PRICE,

2/6

HARD
MEDIUM
and SOFT.
Also
VERY HARD
UNBLEACHED.

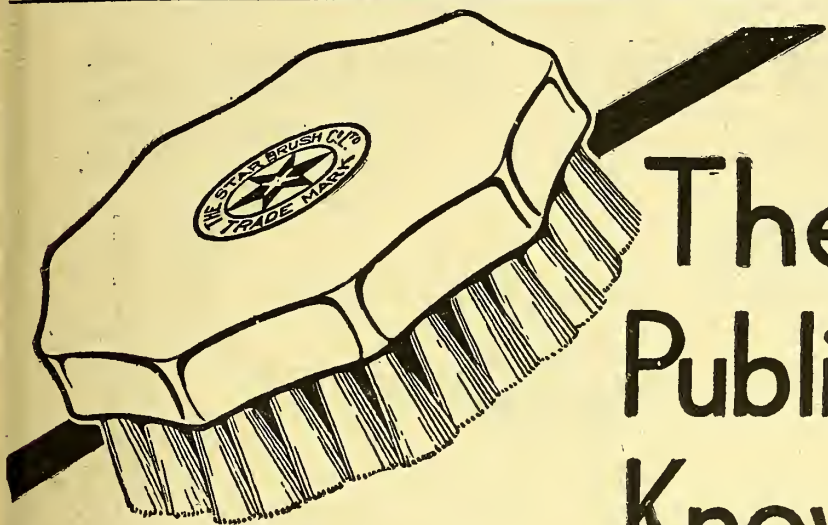


W. R. TILBURY & SON

Est. 1880

47 FRAMPTON PARK ROAD,
HACKNEY, LONDON, ENGLAND

*Phone - - 1794 Dalston



The Public Know

the Star Brush—for domestic purposes it has given satisfaction in thousands of homes.

The Star Nail Brush has this well-earned reputation behind it. To display it spells prestige and profit.

Well made—well advertised and well known, the Star Nail Brush is a builder of big business.

STAR NAIL BRUSHES

Write at once for the splendid sample case containing 81 brushes of the best selling lines which we are supplying for £1 carriage paid.

STAR BRUSH CO. Ltd.

EDEN GROVE,
HOLLOWAY - N.7

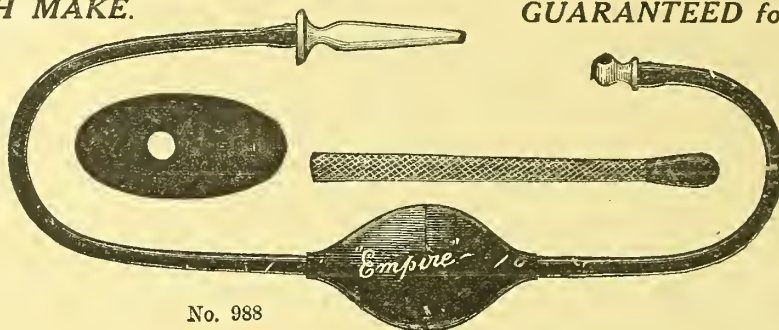


SEAMLESS ENEMAS

BRITISH MAKE.

GUARANTEED for TWO YEARS.

26/- DOZ.



No. 988

26/- DOZ.

No.	Per doz.	s.	d.
No. 988—			
The "Empire," black polished, in card box ...	26	0	
" " in leatherette case ...	30	0	
No. 275—			
Warne's arabesque rubber, in leatherette snap case	54	0	
No. 987—			
The "B.E.M." (best English make), black polished,			
with bone rectal pipe, etc., in card box ...	25	0	
" in superior card box ...	27	0	

No.	Per doz.	s.	d.
No. 987—cont.			
The "B.E.M." in leatherette snap case ...	29	0	
" extra large and stout, the finest article			
made, in superior card box ...	32	0	
" in leatherette snap case ...	34	0	
" red, unpolished, in card box ...	26	0	
" " in leatherette case ...	30	0	
" " stout, in card box ...	30	0	
" " in leatherette case ...	34	0	

CARRIAGE PAID ON ORDERS OF £3 AND UPWARDS.

A discount of 5% for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

BURGE, WARREN & RIDGLEY, Ltd.

91 & 92 GREAT SAFFRON HILL, LONDON E.C.1.

"FIRST AID" CABINETS

Containing the new REVISED FORM 923 which must be included with each complete equipment.

"INGOT" quality throughout.

Delivery by return, no waiting.

No.	
O. Cloth covered (up to 50)	10/8
I. Wooden box " " "	16/-
A. Superior do., drop front	22/-
B. Cabinet-de-Luxe (51-150)	63/-

Subject to liberal discount.

Please send along your requirements. Immediate attention and satisfaction given.

Please note change of telephone number to City 2522, private branch exchange with extensions to all departments.

T. H. FORD, Limited
6 WELL STREET - LONDON, E.C.1

Telegrams: "Drofclym. Cent., London."

Telephone: CITY 2522.

The New "99" VALET RAZOR to retail at 2/6

Register your orders with us now.

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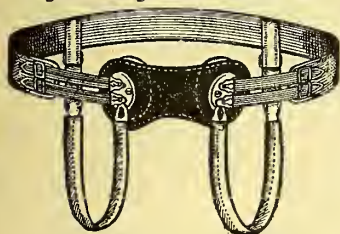
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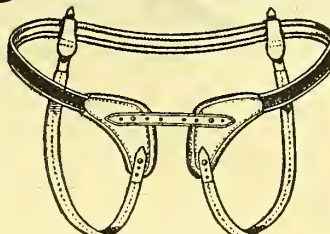
Fig. 60r. Inguinal Elastic Truss.



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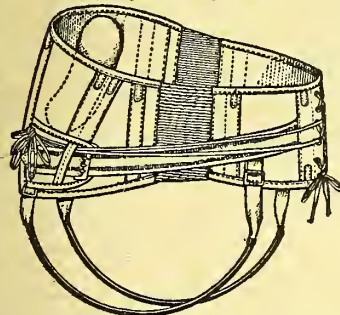
Fig. 64r. Peaked Head Scrotal.



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SEAMED AND SEAMLESS
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ABDOMINAL SUPPORTING and
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SURGICAL CORSETS.
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Sole Agents for the United Kingdom of Great Britain, Ireland and The British Dominions
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Fig. 19. Kidney Belt.



Crêpe Velpeau Bandages.

Fig. 583.

Richmond
Shoulder
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THE
R. H. HEWARD Co.,

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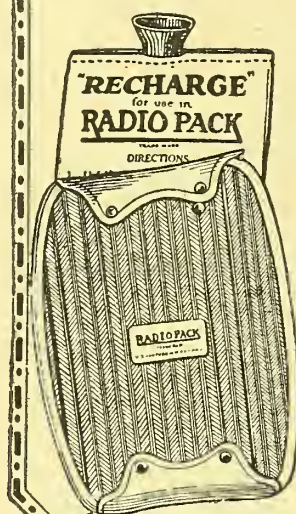
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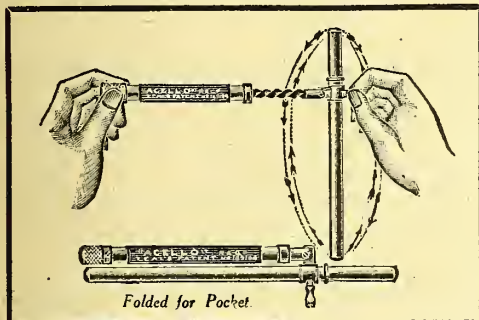
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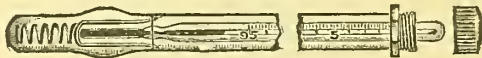
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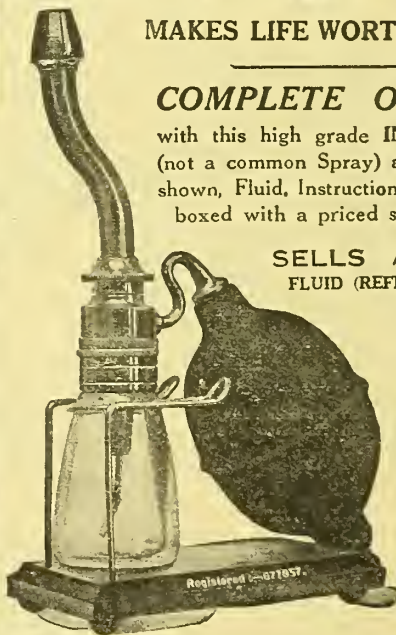
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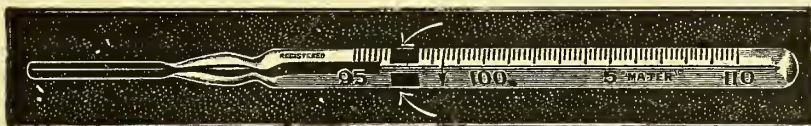
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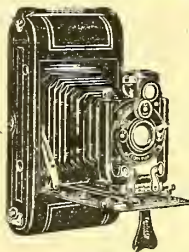


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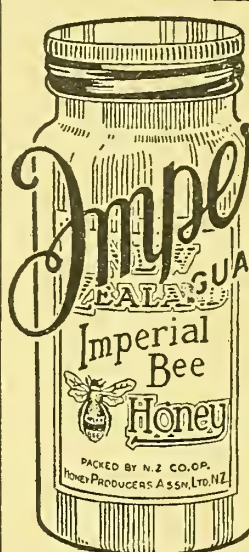
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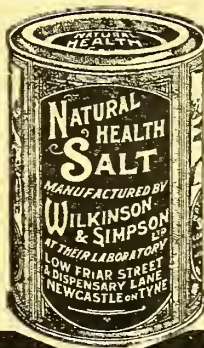
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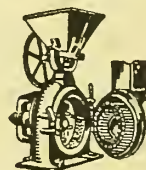
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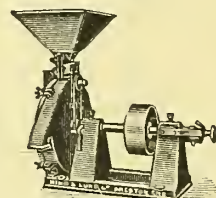
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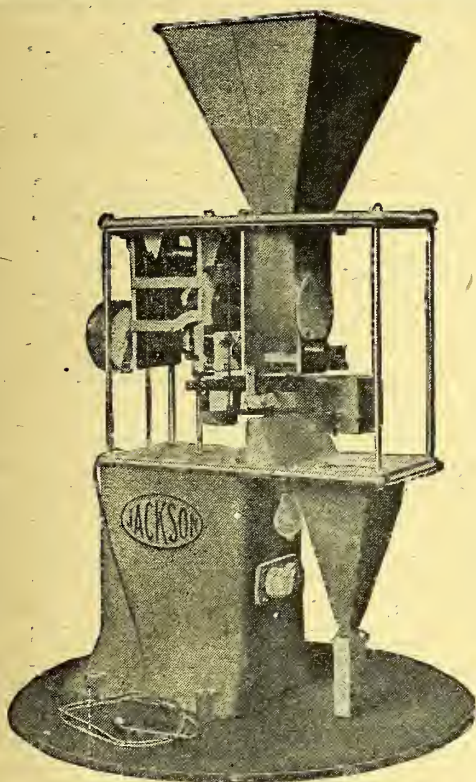


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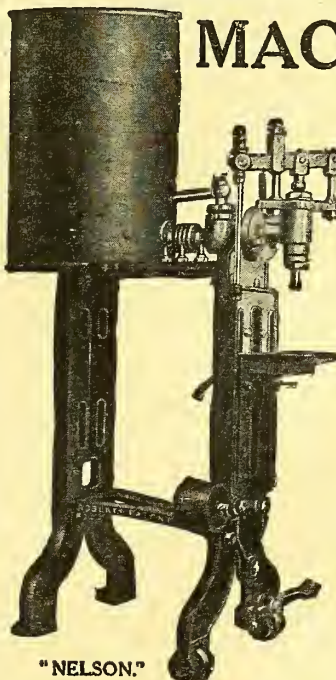
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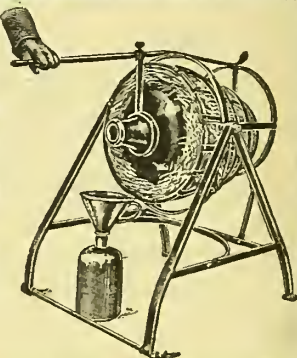
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DOG REMEDIES
AND SOAPS

THE MAGNET



Not replies only

Manchester, 5th Jan., 1924.

"We take this opportunity to assure you that we have found your journal a profitable advertising medium and the replies to our insertions have surpassed our expectations, coming as they have from various parts of the world. It might interest you to know that among the foreign countries from which we have had replies are:—Jamaica, various parts of India, South Africa and New Zealand. The most satisfactory feature is the fact that quite a large percentage of actual business has been obtained."

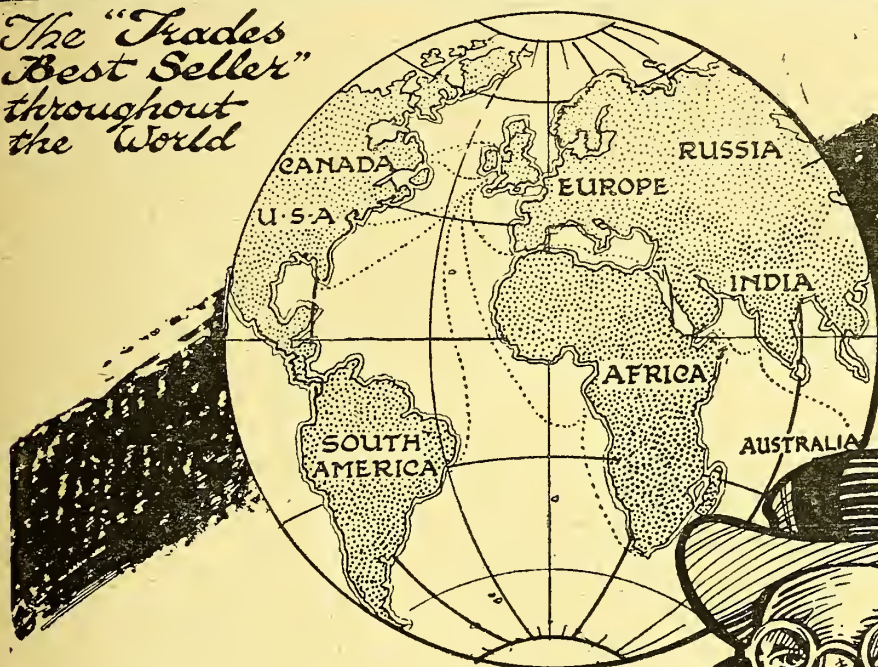
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*The "Trades
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throughout
the World*



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4-12 Old Swan Lane,
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Makers:- J.W. Lightbown & Sons. Manchester Rd. Acerington, Lanes.

Relieves Rheumatism

Musterole relaxes stiff joints and drives out pain. A clean, white ointment made with oil of mustard usually brings instant relief. It does all the good work of the old-fashioned mustard plaster, without its use. Doctors and nurses commend its use. Use Musterole for cough blisters. It prevents pneumonia. It prevents pneumonia. It prevents pneumonia. MUSTEROLE

Guard Against "Flu"

Influenza and pneumonia usually start with a cold. The moment you get those warning aches, rub on Musterole. A clean, white ointment, Musterole really is as effectively as the old-fashioned mustard plaster, but without the blister. Use Musterole for sore throat, congestion, cold on the chest, pneumonia and sore muscles. MUSTEROLE

Don't Neglect a Cold

Mother, don't let colds settle. At the first cough or sneeze, rub Musterole on the throat and chest. Musterole is a pure, white ointment made with oil of mustard. It draws out the work of the mustard, does all the work of the mustard plaster in a good old-fashioned way, without the blister. Keep it far handy. It may prevent pneumonia in your home. BETTER THAN A MUSTARD PLASTER

When Children Cough

When you hear that warning croupy cough, rub Musterole over the child's chest. A white ointment made with mustard, Musterole speeds up the congestion, it has all the virtues of the mustard plaster, without the blister. Use Musterole for colds (it often prevents pneumonia), whooping cough, croup, and croup. MUSTEROLE

This is Your Advertising

For Raw, Sore Throat

At the first sign of a sore throat, rub on Musterole. It goes right to the spot with a gentle tingle, loosens congestion, draws out the soreness. A clean, white ointment made with oil of mustard, Musterole has all the strength of the old-fashioned mustard plaster, without the blister. Use Musterole for colds on the chest (it often prevents pneumonia), congestion, neuralgia and rheumatism. BETTER THAN A MUSTARD PLASTER MILLER'S



Sixty-three publications are each carrying two or three of these Musterole messages every week in February—a total of 144,086,484 impressions for the month.

The cumulative value of this advertising is directly beneficial to you. With one advertisement following so closely on the heels of its predecessor, the name Musterole and all that it stands for inevitably becomes more widely known. Musterole is fast becoming a household word.

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4-12, Old Swan Lane, London, E.C.4

MILLER'S

MUSTEROLE

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When toes, fingers or ear tips burn and itch, gently massage them with Musterole. Musterole's tingling warmth, derived from oil of mustard, quickly restores circulation. A clean, white ointment, Musterole has all the virtues of the old-fashioned mustard plaster, without the blister. Use Musterole for aches and sprains, bruises, rheumatism, lumbago, sore throats, coughs and colds. (It often prevents pneumonia.) BETTER THAN A MUSTARD PLASTER MILLER'S



Fine for Lumbago

Musterole drives pain away and brings in its place delicious, soothing comfort. Just rub it in gently. It is a clean, white ointment made with oil of mustard. It will not blister like the old-fashioned mustard plaster. Use Musterole for coughs, colds, (it often prevents pneumonia), sore throat, neuralgia, headache, rheumatism, chilblains, pains and aches of the back or joints. BETTER THAN A MUSTARD PLASTER MILLER'S



Fine for Neuralgia

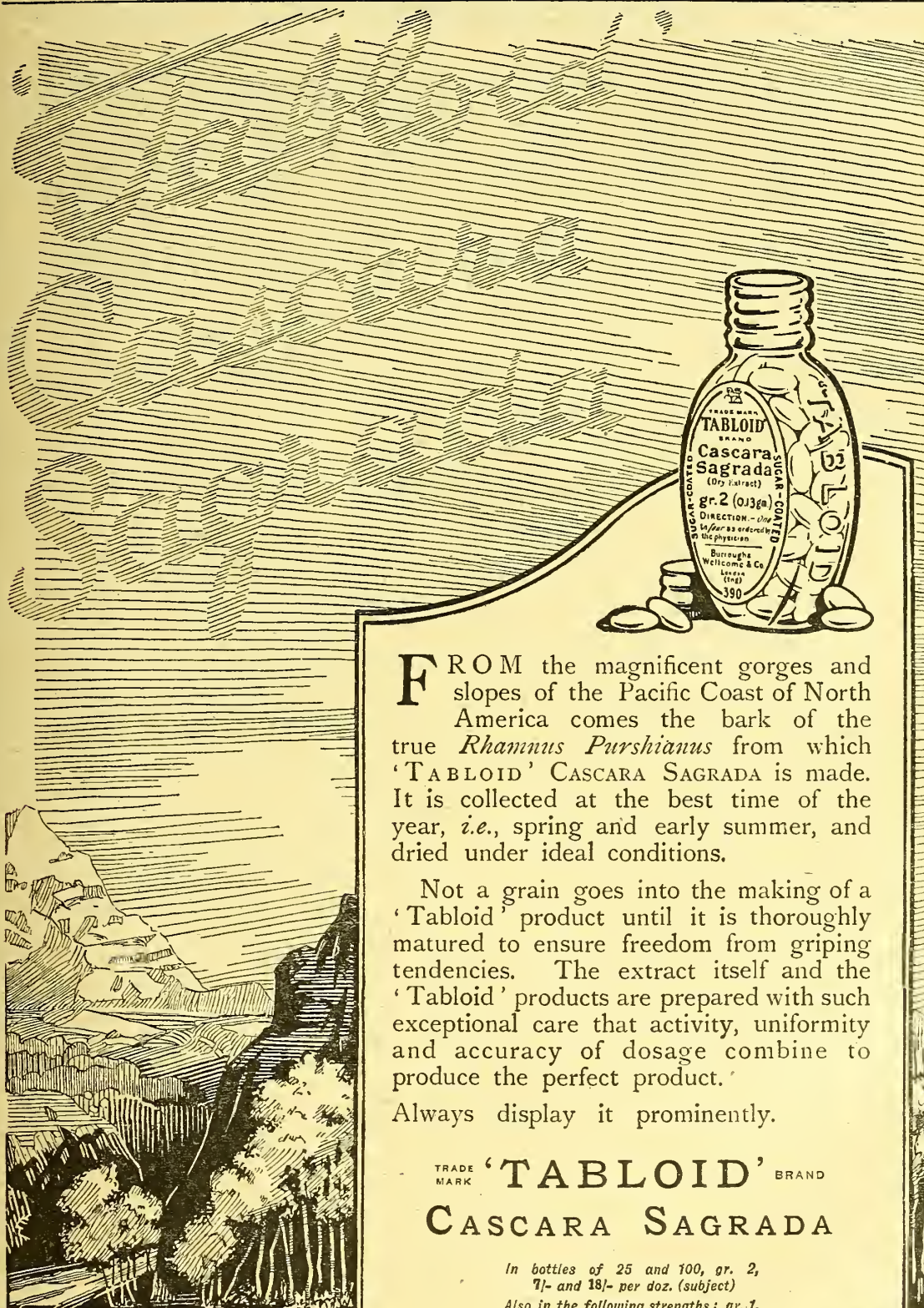
Musterole ensures quick relief from neuralgia. When those sharp pains go shooting through your head, just rub a little of this clean, white ointment on your temples and neck. Musterole is made with oil of mustard, but will not burn or blister like the old-fashioned mustard plaster. Use Musterole for coughs, colds (it often prevents pneumonia), sore throat, congestion, pleurisy and rheumatism. BETTER THAN A MUSTARD PLASTER MILLER'S



For Cold on the Chest

Musterole is easy to apply and it does not blister like the old-fashioned mustard plaster. Musterole is a clean, white ointment made with oil of mustard. Simply massage it in gently with the finger tips. You will be delighted to see how quickly it brings relief. Use Musterole for sore throat, congestion, pleurisy, rheumatism and lumbago. (It often prevents pneumonia.) BETTER THAN A MUSTARD PLASTER MILLER'S





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0.25 gm.

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THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

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TWENTY SHILLINGS a year payable in advance to any part of the world, including a copy of *The Chemist and Druggist Diary*. Subscriptions may begin with the first issue of any month. Single Copy, 9d., post free; *Diary*, 10s., post free. Postal orders and cheques should be crossed "Bank of Liverpool and Martins, Ltd."

Prix de l'abonnement annuel: le journal une fois par semaine, et l'agenda une fois par an, 20s., franco.

TERMS FOR ADVERTISING may be obtained on application to the Publisher.

Head Office: 42 CANNON STREET, LONDON, E.C.4
Telegrams: "Chemicus, Cannon, London." Telephone: Central 3617 (3 lines).

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Melbourne and Sydney, Australia.

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Appreciations

May I express my thanks to you for your excellent publication and for the courtesy and efficiency of your query service?—J. D. (14/1).

The C. & D. is particularly attractive this week, if I may so. The colour-prints are certainly worthy of permanent preservation.—R. C. O. (14/1).

We might also say that, having subscribed to your journal since 1868, we consider it to be a *sine qua non* to the trade and profession.—J. A. B. (13/2).

Having been a reader of the C. & D. since 1881 and a subscriber since 1889, I think your journal is quite indispensable. There is nothing like it in the drug line at home or abroad. "Lang ma yer lum reek."—H. M. R. (30/1)

We duly received yours of January 2, answering our question regarding —, and beg to say how much we appreciate the courtesy you always show in answering the questions we put to you from time to time on matters like this.—F. W. H. (8/1).

English and Welsh News

The Editor would be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

First Aid in Factories

Under this title most of the London daily papers have published the following letter from Sir William Glyn-Jones, secretary and registrar of the Pharmaceutical Society of Great Britain:

During the war a bill was passed giving to the authorities power by order to require that certain factories should possess a first-aid equipment. The Workmen's Compensation Act passed last year, coming into force on January 1, requires such an equipment to be provided in all factories. Stated briefly, a factory for this purpose includes any premises where steam, water, or other mechanical power is used to work machinery employed in making, altering, repairing, ornamenting, finishing, or adapting any article for sale. The equipment prescribed by the Government contains, amongst other things, a small bottle of eye-drops. These eye-drops contain drugs which can only legally be sold by retail by a person or firm legally entitled to carry on the business of a chemist and druggist. As the owner or occupier of every factory is liable to penalties under the new Act unless he has the prescribed equipment, it is important that all such occupiers should see that this first-aid box or cupboard does contain these eye-drops, and if as supplied to them the box or cupboard does not contain the eye-drops, they should immediately obtain them, and this they can do from the nearest chemist. This warning letter is necessary, as in some cases the boxes and equipment supplied by those who are not chemists and druggists may be found not to contain the eye-drops.

Wine-licence Applications

Among the applications for wine off-licences at the Brewster Sessions, those of the following chemists have been granted, subject, in most cases, to the sales being confined to medicated wines:—Messrs. H. Buckley (Bampton, Ltd.), Coventry; W. H. S. Dunn, Northampton; J. S. Gallimore, Northampton; W. Goodall, South Emsall; E. Harrison, Llandudno Junction; J. H. McEllin, Audley; G. B. Todd, Bampton; Timothy White Co., Ltd., Folkestone (two) and Worthing; R. H. B. Whitehead, Oldham.

Applications for similar licences by the following chemists have been refused:—Messrs. A. Blackledge, Preston; Cope & Sons, Leek; B. Crabtree, Burnley; E. E. G. Dennis, Northampton; S. R. P. Fisher, Ph.C. (Fisher & Fisher), Preston; E. J. Martin, Leek; A. W. Sant, Longton; Timothy White Co., Ltd., Newquay.

Birmingham

Mr. and Mrs. Barrow Cadbury have subscribed £100 to the Lord Mayor's relief fund.

Mr. Alec Livingstone, chemist and druggist, has purchased the business of W. H. Blunt & Son, chemists, 70 Snow Hill.

We learn that Mr. Joseph Sturge, who was referred to in our last week's issue (p. 182), has no connection with John & E. Sturge, Ltd., chemical manufacturers.

Many traders are taking advantage of the offer of the Corporation to supply electricity at considerably reduced rates for illuminating shop windows after business hours.

There seems to be a general desire on the part of central-area pharmacists not to keep open during the whole of Wednesday afternoon and evening. It is considered that two or three hours' opening in the evening would be sufficient.

Leicester

At the recent annual meeting of the Aylestone and District Unionist Club Mr. E. A. A. Fry, chemist and druggist (W. J. Lewis, Ltd., chemists), was presented with an envelope containing Treasury notes, in appreciation of his services as secretary, a position he has held for ten years, and from which he is now retiring. Mr. Fry was elected a Vice-President.

This year's exhibition of the Leicester and Leicestershire Photographic Society, which is being held in the

Edgar Wood Hall, is on a much larger scale than its predecessors. A fine collection of photographic studies is to be seen, and there are a number of stalls showing the latest novelties pertaining to photography and wireless telephony. Demonstrations of various processes are also being given.

Liverpool

The Liverpool Pharmacy Club will hold a dance at Acacia House on February 20.

A considerable increase in Insurance dispensing is recorded, due in part to a wave of influenza, but the normal counter trade grows slowly in most areas.

Customs officers seized, on February 8, 400 grams of cocaine in four bottles, which were enclosed in asbestos wrapping round oil pipes in the engine-room of an American liner which had just docked.

A pharmacist recently installed a weighing machine and invited by placard customers to try their weight "free." One of his early experiences was disquieting: a boy not far in his 'teens entered and proceeded to peel off his clothes, intending to ascertain his weight naked, in order to qualify for a juvenile boxing contest. The assistant urged him to be content with discarding his boots, but he persisted in stripping until the pharmacist thrust him into the street. The placard has been withdrawn.

The Liverpool Pharmacy Club had an attendance of thirty-two at the annual meeting, when the officers were re-elected, two vacancies on the committee being filled by Messrs. Derrick (Hawley & Co.) and Stuttard (Harold Lomax, Ltd.). A well-sustained and comprehensive debate on prescribing and dispensing resulted in a majority vote for the separation of the two. The question of the retail sale of patent medicines was disposed of by the contention that the public who ask for patents or other popular remedies thus prescribe for themselves.

Miscellaneous

SOCIETY OF PUBLIC ANALYSTS.—At the annual meeting of the society, held on February 6, Mr. G. Rudd Thompson was elected President for 1924. Among the members of Council are Mr. E. T. Brewis and Dr. J. F. Tocher.

PHARMACY HOCKEY LEAGUE.—At Dartford, on February 9, Burroughs Wellcome & Co. defeated the "Square" by two goals to nil. The game was the deciding one for the Hanbury Cup.—On the same date a match between J. W. Bush & Co., Ltd., and the London College of Pharmacy, was won by the former by four goals to three.

DISPENSING TESTED.—At a meeting of the Warwickshire County Council, on February 6, the county analyst reported that during the past quarter thirteen Insurance prescriptions were tested. Eleven of the medicines did not contain the prescribed ingredients in the quantities ordered, even allowing a liberal margin of error. In six samples the drug prescribed was very expensive, and in five of these samples the drug was in excess of the quantity ordered.

CONSPIRACY CHARGE.—At Marlborough Street Police Court, London, on February 9, Noel Blake Ducker, company director, was again charged on remand with conspiracy in respect of income-tax and excess profits duty (*C. & D.*, February 2, p. 146). Evidence was given by Mr. G. Beck, an Inland Revenue official, and counsel for the defence addressed the court. The magistrate committed the defendant for trial, granting bail in two sureties of £1,000 each and the defendant's own recognisance of £2,000.

Deeds of Arrangement

Moxon, John, 46 Eldon Street, Barnsley, chemist and druggist. Among the creditors are Kodak, Ltd., £119; and Lofthouse & Saltmer, Ltd., manufacturing chemists, Hull, £80.

Scottish News

Brevities

The window of the pharmacy of Mr. J. Duncanson, chemist and druggist, Stirling, was smashed by a motor-car on February 1.

William Hill & Co., 8 Watson Street, Glasgow, have taken over the business of manufacturers' agents carried on by the late Mr. William Hill at the same address.

Among the donations to the City stall, which is being arranged in connection with the Lord Roberts' Memorial bazaar in Dundee, is a quantity of perfumery and soap from Mr. J. Anderson, chemist and druggist.

At a recent meeting of the Milnathort Literary Association a lecture on "Einstein's Theory of Relativity: What it is," was given by Mr. J. Rutherford Hill, Ph.C. The President, Mr. J. T. Michie, chemist and druggist, occupied the chair.

Edinburgh

Mr. William W. Hunter, chemist and druggist, formerly of 40 Cross Street, Fraserburgh, has purchased the business of Mr. W. Smith, chemist and druggist, 41 Roseburn Terrace.

Among the papers read at a meeting of the Royal Society of Edinburgh, on February 4, were "An Investigation into the Structure and Life History of the Sulphur Bacteria," by Dr. David Ellis, and "The Theory of the Mechanical Analysis of Sediments by Means of the Automatic Balance," by Mr. R. A. Fisher.

Irish News

Brevities

Mr. Robert Hastings, J.P., R.D. (Robert Hastings, Ltd., Newcastle, co. Down), has been elected to the local committee of the Royal National Lifeboat Institution.

A. Bourjois et Cie., Ltd., announce that Harwood Bros. have been appointed their sole representatives for Ulster and the Irish Free State. Mr. V. C. Harwood, 8 College Square North, Belfast, will represent Ulster, and Mr. P. H. Harwood, 28 South William Street, Dublin, the Irish Free State.

Belfast

Mr. W. J. Hardy, Ph.C., Castle Place, Belfast, has been appointed captain of the Knock Golf Club for the ensuing year.

Mr. S. J. Hudson, Ph.C., 355 Beersbridge Road, Belfast, is moving to a new and larger pharmacy at the corner of Bloomfield Road and Beersbridge Road.

Mr. James Moffett, 225 Donegall Road, Belfast, has written the Public Health Committee of the Belfast Corporation in reference to the free supply of disinfectants. The medical superintendent officer of health stated that the department's desire is to give free disinfectants only to the poor, and also when called upon to supply disinfectants where infectious disease has broken out.

The Bill to set up the Pharmaceutical Society for Northern Ireland is now under consideration of the law advisers of the Government. A deputation from the Executive Committee travelled to Dublin on February 11 and interviewed Mr. Meeke, the solicitor to the Pharmaceutical Society of Ireland, as to the points in the existing pharmacy law that require amendment. This deputation consisted of Mr. W. J. Hardy and Mr. Jas. Dundee, and they will report to the Committee.

Dublin

A consent was made a rule of court in the King's Bench Division, Dublin, recently, in the action by John Bell & Croyden, Ltd., London, manufacturing chemists, against Dr. M. O'Brien, County Hospital, Wexford. The action was for the recovery of £216 7s. 6d. for goods. The consent provided that £158 15s. be paid to the plaintiffs, the balance to satisfy defendant's counterclaim.

French News

(From the "C. & D." Paris Correspondent.)

THE ANNUAL BALL of the Friendly Association of Students of Pharmacy is to be held at Claridge's Hotel, Champs-Elysées, on February 16.

PHARMACIST PRIZE-WINNER.—The Academy of Sciences has awarded the Henri de Parville prize of 2,500 francs to M. Lenoir, pharmacist at St. Ouen (a Paris suburb), for the thesis on "The History and Legislation of Saltpetre," accepted for his degree of Doctor in Pharmacy.

PHARMACEUTICAL MEDALLISTS.—The Paris Society of Pharmacy has awarded its gold medal for physico-chemical theses to M. Sommaire, and the silver medal to M. Lachartre. The gold medal for natural science goes to M. Liot, and the silver one to M. Costy. M. de Saint Steban takes the Vigier Prize, M. Charaux the Landrin Prize.

MANUFACTURE OF SODA.—The agreement entered into by the French Minister of War and the Société d'Etudes et Produits Chimiques in 1922, to promote the manufacture of soda and caustic soda in France, has now received Parliamentary approval. The agreement stipulates that, within a period of two years from the definite approval of this contract, the daily output of the plant in Mouguerre shall amount to 100 tons of soda, to be used for the production of 75 tons of caustic soda.

HIGHER IMPORT DUTIES.—In conjunction with the financial proposals for the defence of the franc, a number of bills have been introduced to increase certain rates of duty, or to raise the "co-efficient" (the figure by which the actual charge is to be multiplied). Among these are: lead chromate, lead oxide, ammonium salts containing phosphorus, lead acetate, carbon disulphide, and sodium hydrosulphite, for which a special rate is demanded.

WEIGHT SPECIFICATION.—The question of net and gross weight in the wholesale drug trade recently arose between two members of the Paris Wholesale Druggists' Association. The purchaser had ordered a ton of chamomiles. On delivery he found that the weight was one ton gross. The vendor pleaded that no special condition having been made, he had executed the order according to the custom prevailing in the chamomile-growing region, i.e., net for gross. Buyer and seller agreed to submit the point to the arbitration of the Association, which body decided that as the written order called for "one ton of chamomiles," the buyer was entitled to a full ton of flowers.

PROFIT ON PROPRIETARIES.—The General Association of French pharmacists does not appear to have abandoned its intention of advising its members to "disinterest" themselves in the sale of proprietaries which do not yield a "minimum discount of 30 per cent.," since a circular recently issued invites pharmacists to cold-shoulder four specified preparations. To conduct such a campaign against proprietaries of old standing would, of course, be worse than useless. The feeling is simply that newly-introduced proprietaries could well afford to fix their prices at a figure that will allow an adequate profit to the pharmacist, otherwise the latter has no interest in pushing the sale of products yielding an unsatisfactory margin of profit.

MR. RICHAUD, President of the Paris Society of Pharmacy for 1924, is a Paris hospital pharmacist, who, until 1827, was preparator at the Paris Faculty of Pharmacy, and is now Professor of Materia Medica and Pharmacology in the Paris Faculty of Medicine. He has sat on the Codex Revision Committee since 1912, and in 1913 attended the International Congress of Pharmacy at the Hague as official representative of the Minister of Public Instruction. During the war he was attached to the sanitary service of the French Army, and in 1916 received the War Cross and the Legion of Honour. He has published numerous works on pharmacology, materia medica, biological and pathological chemistry, and hygiene; his "Précis de Therapeutique et Pharmacologie" has run through five French and one Spanish edition.

American Notes

By "The Man from London."

HEADQUARTERS BUILDING FOR PHARMACY.—The American Pharmaceutical Association has appointed a committee of five, with Mr. H. A. B. Dunning as chairman, to organise a larger committee to solicit from U.S. druggists \$500,000. This sum is intended for the erection of a headquarters building and the establishment of an endowment fund for the activities of the association. The building will be available for use by all interests allied with American pharmacy.

A CAUTION IN STERILISATION.—After two deaths from gas bacillus infection following operations occurring in the Boston City Hospital an investigation located the source of trouble as being the instruments used. These had gone through the usual process of washing thoroughly in hot water and soap, rinsed in scalding water, and before being used again were placed in a sterilising solution of 70 per cent. alcohol for from five to twenty minutes. The investigation demonstrated to Nye and Mallory ("Boston Medical and Surgical Journal") that immersion in 70 per cent. alcohol for one hour fails to sterilise instruments infected with bacilli belonging to the *B. aerogenes capsulatus* group.

MIDNIGHT OIL ECONOMISTS.—Investigations are still being made into the activities of the "fake diploma mills," whose certificates were to be had for the asking, always providing that a certain sum of money accompanied the request for a diploma conferring the dignity of a doctor of pharmacy, medicine, or dentistry upon the person applying by mail for such. In New York an inquiry is talked of into the status of about 150 druggists who are said to have been fraudulently using the degree of Doctor of Pharmacy. It is claimed that more than 3,000 "graduates" of Chicago "diploma mills" have opened offices in small towns during the past year, and started practising medicine and pharmacy.

BLOOD TELLS.—Dr. Abrams, who died recently, claimed to have invented apparatus with which he could diagnose disease from a drop of blood. The "electronic reactions of Abrams" created much discussion in America. By his discovery he claimed he could tell the sex and age of a person from whose veins the blood was drawn for the test. Apart from his theory, Dr. Abrams had gained some prominence in medicine. He studied in Heidelberg, and took post-graduate courses in London, Berlin and Paris. Among other claims concerning the human body, he believed each person threw out vibrations of the emotions affecting them, and that a machine is possible which will register love vibrations and determine in which direction they go. Dr. Abrams left many followers of his theory, and practitioners of it have become numerous throughout this country.

LAND OF DOPE.—According to the annual report of the Commissioner of Internal Revenue, at the beginning of 1923 a total of 457,953 oz. of imported taxable narcotic drugs of all kinds was in Customs custody, and 6,180,582 oz. were imported during the year, making a total available quantity of 6,638,535 oz. Of this, 6,450,605 oz. were withdrawn for domestic use, and 7,660 oz. were lost, wasted, or confiscated, leaving a total of 180,270 oz. in Customs custody at the close of the year.—"Instances of violations by pharmacists of their professional or their legal obligations in the handling of narcotic drugs have been few and far between," Judge H. S. McDevitt, in "Squibb Message," pays this compliment to American pharmacists in warning the nation against the menace of narcotic drug addiction, which he claims is simply appalling in its proportion here, and has increased during the past two years so much that three times the amount of narcotic drugs are used. "There are not less than one million drug addicts in the United States to-day, and we consume 36 grains of narcotic drugs per capita per annum, which is the largest amount per capita of any nation in the world. The narcotic drugs most commonly used are cocaine, morphine and heroin, and their distribution is really in the hands of unscrupulous drug peddlars."

Colonial and Foreign News

CHILEAN DUTY ON CIRCULARS.—The duty on printed advertising circulars sent to Chile (Tariff No. 1,123) now amounts to 1.50 gold pesos per kilogram gross weight.

ALBANIAN CUSTOMS TARIFF.—The recently elaborated Albanian customs tariff contains 509 titles, the rates of duty being levied on the weight of the articles imported. However, on medicinal preparations, apart from such as are admitted free of duty, an *ad valorem* duty of 20 per cent. is levied, the same rate being charged on all goods not specifically mentioned in the tariff.

TURNOVER TAX IN GREECE.—The National Assembly will shortly discuss the proposed turnover tax, which by an order of the late government was to be introduced on April 1, 1924. It may be mentioned that a law of June 27, 1920, imposed a tax of 10 per cent. on the retail price of all perfumes and pharmaceutical specialties, but up to the present it has not been enforced.

INSULIN IN NORWAY.—A circular issued by the Norwegian Civil Medical Board to all pharmacists and medical practitioners states that insulin, diasulin, and other pancreatic extracts used in the treatment of diabetes may only be supplied on a medical man's prescription, which may not be repeated. These preparations, therefore, are to be classed among the poisons specified in Article 4 of the regulations for the sale of poisons, etc., in pharmacies.

CZECHO-SLOVAK PHARMACOPŒIA.—Since the establishment of the republic, the Austrian pharmacopœia has been retained as the official standard in Czecho-Slovakia, but already at an early date a movement was initiated in favour of a national pharmacopœia. A pharmacopœia commission was appointed by the Government, and at a recent meeting of the committee the chairman was able to present the introduction and all articles included between the letters A and B, complete in the form which had been definitely adopted. At the same time he stated that the remaining articles were so far advanced that proofs would shortly be sent to the various sections of the commission. It was decided to publish in one of the official organs those articles which possess special importance, in order to invite criticism and suggestions on a broad basis by bringing them to the notice of the general public. The completed portion of the work was then handed to the pharmaceutical section of the commission, to enable the latter to examine closely those articles which had not yet been submitted to it for exhaustive discussion. The draft of the new pharmacopœia is being prepared in the Czech language, and the Latin translation of the work has been entrusted to Dr. Ryba.

College Notes

LEEDS COLLEGE OF PHARMACY

THE third session of the "Altior" Students' Society opened recently with a paper by Mr. Arthur W. Lupton, entitled *An Introduction to the Theory of Relativity*. The subject was taken in a general way, and the theory compared with the statements of Euclid, Newton, and others. Several examples were dealt with at length and proved of great interest. The second paper of the session was given by Mr. F. P. Sargeant, jun., chemist and druggist, on *Diamonds*. The lecturer divided his subject into: (a) Formation of precious stones; (b) preparation for the market; (c) history of more important diamonds. Among the stones dealt with were the Koh-i-noor, Orloff, Piggott, Sancy, Hope (blue), Nassack, Florentine, Pitt, and Cullinan diamonds. Exact models of all these and many others were shown. The lecture followed one by Mr. F. Pilkington Sargeant, principal of the College, on *Silica*, during which 400 specimens were shown.

A HUMAN BATTERY.—A device for the prevention or cure of rheumatism has been patented (No. 209,556), consisting in inserting in the right boot a copper, and in the left one a zinc plate.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Monday, February 18

Manchester and Salford Chemists' and Assistants' Association, Clarion Café at 8.30 p.m. Concert lecture on "A Night with Gilbert and Sullivan" by M. Barritt.

Tuesday, February 19

Croydon Pharmacists' Association, Café Royal, North End, Croydon, at 7.45 p.m. Annual dinner. Tickets (7s. 6d. each) from S. A. Noble, Selsdon Road, South Croydon.

Wednesday, February 20

London, Westminster, and South of England Colleges of Pharmacy, Avondale Hall, London Road, Clapham, S.W., at 7 p.m. Social and dance. Tickets (3s. 6d. each) from Mr. R. Band, 190 Clapham Road, S.W.9.

Pharmaceutical Society of Great Britain (Glasgow and South-West Branch), Picture House Hall, High Street, Ayr, at 3.30 p.m. Speaker: Mr. Thomas Guthrie, Member of Council. *Plymouth Pharmacists' Association*, Duke of Cornwall Hotel, Millbay, at 7.30 p.m. Annual dinner at 7.15 p.m. Tickets (7s. 6d. each) from Mr. F. A. Spear, secretary, or members of the Committee.

Thursday, February 21

Chemical Society, Burlington House, Piccadilly, London, W., at 8 p.m. Four papers will be read.

North-East London Pharmaceutical Association, St. John's Institute, Urswick Road, Hackney, at 3 p.m. Mr. John Noble, "Shibboleths and Shops."

Pharmaceutical Society of Great Britain (Newcastle-on-Tyne Branch), County Hotel, Neville Street, at 8 p.m. Mr. F. N. Binks on "The Relation of Laboratory to Manufacturing Pharmacy."

Pharmaceutical Society of Great Britain (Watford and St. Albans Branch), Buck's Restaurant, 48 High Street, Watford, at 8.15 p.m. Mr. F. Browne on "The B.P. Codex."

NORTH LONDON PHARMACEUTICAL ASSOCIATION.—The meeting announced for February 20 has been postponed to February 26 at The Library, Manor Gardens, Holloway Road.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (CHESTER BRANCH).—A dinner and musical evening will be held at Blossoms Hotel, Chester, on February 27, at 7 p.m. Tickets (8s. 6d. each, 16s. double) from Mr. D. T. Dickinson.

LIVERPOOL CHEMISTS' ASSOCIATION.—The annual dinner will be held on February 27 at the Midland Adelphi Hotel at 6.45 for 7 p.m. Tickets (10s. 6d. each) from members of Council or J. L. Hirst, 23 Eastfield Drive, Sefton Park.

WEST HAM ASSOCIATION OF PHARMACISTS.—The "coming of age" dinner and dance will be held on February 28, in the Crown Room, Holborn Restaurant, London, W.C. Tickets (12s. 6d.) from B. Wathen, Social Secretary, 405, High Street, Stratford.

Business Changes

A. BOURJOIS ET CIE., LTD., have removed to 4 Water Lane, London, E.C.

THE Merkham Trading Co., Ltd., have removed to Bush House, Aldwych, London, W.C.2.

NERVIX, LTD., have removed from Marsh, Huddersfield, to 12 Pinecliffe Avenue, Bournemouth.

MR. A. V. LESTER, chemist and druggist, Canterbury, has opened a branch business at 24 Wincheap Street.

THE "Salus" Co., Ltd., have removed to Euston Tube Station, Drummond Street, London, N.W.1. The new telephone number is "Museum 1044."

MR. N. LANDER, chemist and druggist, has purchased the pharmacy of Mr. J. R. Woolhouse, chemist and druggist, 332 Wakefield Road, Dalton, Huddersfield.

MR. A. YEATES, chemist and druggist, 50 High Street, Stourbridge, has taken over the business of the late Mr. S. Smith, chemist and druggist, 66 High Street, Wordsley. Mr. C. W. Yeates, chemist and druggist, will be the manager.

THE MOUSE AND THE BEETLE.—A Midlands correspondent (13/2) calls our attention to a Press statement to the effect that mouse virus is effective in ridding premises of beetles.

Legal Reports

Deficient Sweet Spirit of Nitre.—At Connah's Quay Petty Sessions, recently, Mary Ann Richards, shopkeeper, Church Street, was summoned on a charge of selling sweet spirit of nitre not of the nature, substance and quality demanded. She pleaded "Guilty." Evidence was given to the effect that the county analyst found his sample to contain a percentage of "foreign ingredients," and to be deficient to the extent of 52.6 per cent. in ethyl nitrite. The defendant said that the spirit had been in the shop eight years. She was ordered to pay 17s. 11d. costs.—At Holywell (North Wales) Police Court, recently, Mr. J. T. Morgau, chemist and druggist, High Street, was ordered to pay 11s. 8d. costs on a summons for having sold sweet spirit of nitre deficient in ethyl nitrite.

Hair-dye Damages Claim.—In the King's Bench Division of the High Court, London, on February 11 and 12, Mr. Justice Horridge and a special jury heard an action in which Mrs. Mary Macmaster, Albemarle Mansions, Hampstead, N.W., sued Mr. Ernest Durr, hairdresser, Adam Street, W., to recover damages for alleged negligence or breach of warranty in connection with the dyeing of her hair with Inecto. There were three counsel on each side. The plaintiff's case was that she went to the defendant in October 1921 to have her hair examined, and after conversation with him agreed to have it dyed, placing herself entirely in his hands. The defendant made two applications of Inecto, and shortly afterwards the plaintiff suffered from irritation of the scalp, swelling of the face, and headache. She spent several months in nursing homes, and did not recover until the end of 1923. She claimed the sum of £126 as special damages. Mr. J. K. Colwell, F.I.C., gave evidence that he analysed a sample of Inecto and found it contained paraform, which was liable to cause eczema and irritation of the skin. He did not think it was safe to use it on a human skin. Cross-examined, the witness said that if the defendant had used Inecto 3,000 times without any complaint, his customers were lucky. The defendant gave evidence to the effect that the plaintiff told him she had used Inecto before. He examined her scalp carefully, and he used Inecto "ordinary," not "rapid." He took every precaution. The preparation was still being used very widely, but he required his customers to sign for it when they had the treatment. His lordship said the question for the jury was whether the defendant had used reasonable skill and care. The jury found for the defendant, for whom judgment was accordingly entered, with costs.

Arbitration Dispute Appeal.—In the Court of Appeal, London, on February 7, before Lords Justices Bankes, Scrutton and Sargant, the case of Scrimaglio v. Thornett & Fehr was heard upon the appeal of the plaintiff, a Genoa merchant, from a judgment of Mr. Justice Greer upon a preliminary point of law (*C. & D.*, II, 1923, p. 607). The plaintiff sought to recover the sum of £392 from the defendants (of Leadenhall Street, E.C.) as overpayment in respect of vegetable tallow, the claim being admitted subject to the defendants' counterclaim arising out of two contracts, dated March 1920, by which the plaintiff agreed to purchase from the defendants 200 tons of soda ash c.i.f. Genoa. The arbitrator (Mr. Charles Mangold) awarded the defendants £4,800 damages against the plaintiff, which sum the defendants counter-claimed for. The plaintiff denied liability. Mr. Justice Greer held that the words "in the usual way," in the clause in the contract, referred to the chemical trade. He accordingly decided the preliminary point in favour of the defendants, and gave judgment for them for £4,414 12s. 7d., with costs. Mr. A. Neilson, K.C., and Mr. C. W. Pitman appeared for the appellant; Mr. Jowitt, K.C., and Mr. J. Dickinson were for the respondents. Without calling upon counsel for the respondents, their lordships dismissed the appeal. Lord Justice Bankes said that the sellers appointed their arbitrator and gave notice to the buyer that they had appointed an arbitrator. The Italian buyer having failed to appoint an arbitrator, the sellers' arbitrator proceeded to act as sole arbitrator and gave notice to the buyer

of his intention to proceed. In answer to a counterclaim, the buyer set up that the arbitrator had no jurisdiction, and even if he had that he had acted irregularly by omitting to give proper notices. As to that, his lordship said that it was plain, on the authorities, that that defence was not open to the buyer. In *Oppenheim & Co. v. Mahomed Haneef*, Lord Cave had said that any objection to an award on the ground of misconduct or irregularity on the part of an arbitrator must be taken by motion to set aside or remit the award, and if no such motion was made within the limited time then the remedy was gone. Mr. Justice Greer had read the arbitration clause as referring to London and as indicating the law which was to govern it, and he had held that "in the usual way" meant the way in which disputes arising as to the particular commodity or class of commodity were settled. If that was the true meaning of the clause, then the evidence was all one way, and the only question which remained was whether the particular way adopted in this case was the usual way. In his judgment it was. The appeal, therefore, failed. The other lords justices concurred.

Bankruptcy Reports

Re Basil Guy Gerard Alabone (Alabone & Co., chemists), deceased, 22 Port Street, Evesham.—The administration order in this matter was made on December 11, 1923. The statement of affairs shows liabilities £748 16s. 1d., against net assets £247 14s. 6d. (*C. & D.* I, 1923, p. 505). The following are among the creditors:—E. H. Butler & Son, manufacturing chemists, Leicester, £32.

Re Phillip Fainlight, 4 Clifton Street, London, E.C., manufacturer of toilet preparations, trading as the Clifton Toilet and Perfumery Co.—The public examination of this debtor was held recently at the London Bankruptcy Court. The debtor, who also carried on business as a trunk and suitcase manufacturer, failed in June 1923, with total unsecured liabilities £3,673, and assets valued at £1,072. In the course of his evidence the debtor stated that in 1915 he took premises at 4 Clifton Street and there traded as a manufacturer of wooden trays and toilet preparations. He attributed his failure to bad trade and loss by fire at his Kingsland Road premises. He stated that in September 1921 there occurred a fire, in respect of which he recovered £1,175 under his insurance policy; early in 1923 another fire took place, and he recovered £380 for the damage sustained; a fortnight later there was a third fire. He put in a claim for £2,000, and eventually the matter was settled for £1,050 and the salvage, which was worth £200; he also claimed £389 for loss of profits, and was given £262 in settlement of that claim. The accounts filed under the bankruptcy showed a net loss on the trading during 1923. The examination was adjourned.

Re Albert Charles Willmer, trading as Willmer's Drug Stores, Street, Somerset (*C. & D.*, February 2, p. 159).—The first meeting of the creditors of this debtor was held on January 30 at 26 Baldwin Street, Bristol. The case was left with the official receiver as trustee of the estate.—The public examination was held recently at Wells. Debtor, in reply to questions, said that between the date of his first failure and commencing in business again, he followed the occupation of a chemist's assistant in London. The business at Street was fairly successful until about June last. He had an accident, and for two months the shop was closed. Questioned as to borrowing money, debtor admitted borrowing £10 from Dr. Mac Vicker, Street, to pay an account. He borrowed £100 from a money lender, and gave a promissory note for £140, the monthly instalments being £14. He admitted that in a signed statement to the money lender he represented that he had two shops, which at that time was true, that his stock was worth between £900 and £1,000, and fittings worth £300 to £400. The examination was closed. The following are among the creditors: Butler & Crispe, £50; Arthur H. Cox & Co., Ltd., £13; F. Newbery & Sons, Ltd., £22; United Chemists' Association, Ltd., £12.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office

RODOVUS, LTD. (P.C.).—Capital £1,000. Objects: To acquire the business of a manufacturing chemist, now carried on by G. E. Brine at 75 Victoria Street, Westminster, as "The Universal Vermin Repression Co.," together with the registered trade-mark "Rodovus," etc. The directors are: G. E. Brine, F. W. Woodliffe, and J. N. Strong.

MICHELL'S PHARMACY, LTD. (P.C.).—Capital £1,000. Objects: To take over the "West End Pharmacy," 35 Fore Street, St. Austell, and to carry on the business of chemists, druggists, stationers, wine and spirit merchants, patent medicine proprietors and vendors, dealers in optical and photographic goods, etc. The directors are: P. G. Michell and Mrs. M. L. Michell. R.O.: 35 Fore Street, St. Austell.

A. F. BAYFORD & Co., LTD. (P.C.).—Capital £10,000. Objects: To carry on the business of manufacturers of and dealers in implements, tools, preparations and articles used in connection with manicure and chiropody, or otherwise in relation to the treatment of hands and feet, essences, lotions, extracts, oils, soaps, pomades, preparations for the teeth and hair, and salts and perfumery goods of all kinds, boxes, cases, packets, bottles and other receptacles, etc. The directors are: H. C. and H. W. Quelch, 4 and 5, Ludgate Square, E.C.4, and A. F. Bayford.

LAMBERTS (DALSTON), LTD. (P.C.).—Capital £5,000. Objects: To carry on the business of manufacturers and importers of and dealers in anatomical, orthopaedic, surgical, electrical, chemical, photographic, medical and scientific apparatus and appliances, and cements, oils and drugs, boot, stay and corset makers, artificial eye and limb makers, makers of bandages, belts, trusses and elastic hosiery, etc. The directors are: E. W. Lambert, H. P. N. Watkins, H. W. Lambert, and P. M. C. Watkins. Solicitors: Rexworthy, Barnard & Bonser, 90-91 Queen Street, London, E.C.4.

W. SWAN & Co., LTD. (P.C.).—Capital £6,000. Objects: To acquire the business now carried on at Westfield Works, Westfield Road, Shipley, as "W. Swan," and to carry on the business of importers, exporters, manufacturers, buyers and refiners of oils, fats, waxes, soaps, lubricants, fine and heavy chemicals, toilet and pharmaceutical preparations, oleines and stearines, buyers of and dealers in bones, animal products and hides, glue, gelatine and fertiliser manufacturers and merchants, etc. The directors are: W. Brooksbank and W. Swan. R.O.: Westfield Works, Westfield Road, Wrose Hill, Shipley.

MEXCO, LTD. (P.C.).—Capital £15,375. Objects: To carry on the business of manufacturing and operating chemists, manufacturers and importers of and dealers in all kinds of salts, acids, alkalis, drugs, medicines, chemical materials and scientific instruments; manufacturers of explosives, gunpowder, nitro-glycerin, dynamite and cotton blasting powder, etc. The directors are: A. C. Scott and W. A. Scott. R.O.: Caledonian Chambers, 102 St. Mary Street, Cardiff.

MAGADI SODA Co.—A petition for the winding up of the Magadi Soda Co. has been presented by the Controller of the Clearing Office. It will be heard before Mr. Justice Eve on February 19.

THE VANGE WATER Co., LTD.—A meeting of the creditors of this company was held on February 11 at 2 Foster Lane, London, E.C., when it was stated that there was only one trade creditor. No resolution was passed, and the voluntary liquidation will be continued with Mr. McManis as liquidator.

CHEMISTS' DEFENCE ASSOCIATION, LTD.—At a meeting of the directors held at 19 Tavistock Square, London, W.C.1, on February 5, the date of the annual meeting was fixed for March 25. A resolution of sympathy was

passed with the relatives of the late Mr. J. G. Atkinson, and ordered to be recorded on the minutes.

BOVRIL, LTD.—The directors recommend a dividend for the second half of the year (subject to final audit) on the Preference shares at the rate of 6 per cent. per annum, less tax; on the Ordinary shares at the rate of 7½ per cent. per annum, less tax; and on the Deferred shares a dividend of 9 per cent. and a bonus of 6d. per share for the year 1923, both free of tax. They propose adding £75,000 to the reserve, leaving £34,284 to be carried forward, subject to corporation tax.

MACANDREWS & FORBES Co.—Filed pursuant to Section 274 of the Companies (Consolidation) Act. Capital \$13,030,000. Incorporated in U.S.A., to extract liquors from liquorice root and otherwise treat, manufacture, convert, refine or operate on such root; to manufacture other extracts out of wood, bark, leaves or root, or any other extract for tanning, cleansing, dyeing or other purposes; to manufacture, convert, refine or treat any chemical or other substance useful or capable of being used as a flavouring matter or casing for tobacco or any other product, etc. British address: Bush House, Aldwych, London, W.C.2. A. E. C. Bird, 29 Clifton Crescent, Folkestone, and F. Struthers, of 21 Chaucer Road, Bedford, are authorised to accept service of process and notices on behalf of the company.

BORAX CONSOLIDATED.—The report for the year to September 30, 1923, shows profits, after providing for all management and administration expenses, of £442,753. The debenture interest absorbs £86,240, and after providing for the interim dividends paid and including £123,893 brought forward, there is available £440,406. The directors have placed to buildings, plant, etc., depreciation reserve £40,000, and to debenture stock redemption sinking fund the annual premium of £5,825, and propose a final dividend of 1s. 6d. per share on the deferred ordinary shares, making 12½ per cent., and a bonus of 6d. per share, placing to reserve £25,000, to income-tax reserve £15,000, to pensions fund £5,000, leaving to carry forward £137,081. The directors state that the strictest economy in the cost of production both of raw and refined material has enabled the company to make considerable concessions.

BAISS BROTHERS & Co., LTD.—The creditors of this company were called together on February 8, at Thames House, London, E.C. The chair was occupied by Mr. E. Norton, the liquidator, who stated that the company went into voluntary liquidation in 1922. The assets had realised £27,057 15s. 1d. The stock was originally set down at £9,000 and had realised £4,665 10s. 2d., while the book-debts of £7,700 had produced £7,252 12s. 7d. In 1922 the loans and advances were valued at £1,902 6s. 7d., but the liquidator pointed out that he had been able to realise £4,244 13s. 9d. No value was originally placed on the goodwill, but it had been disposed of for £1,500, while the lease of the Bermondsey premises had produced £500. Nothing had been received on account of the consignment and agency accounts, which in August 1922 figured at £2,096 8s. A sum of £2,096 8s. had been recovered in respect of excess profits duty, and the surplus from securities in the hands of fully secured creditors amounting to £7,858 10s. 8d. had realised £5,095 19s. 10d. During the course of the liquidation the trading payments of the liquidator totalled £26,983 19s. 1d., against receipts of £26,898 18s. 4d., or a loss of £85 0s. 9d. The net receipts in the hands of the liquidator had totalled £26,972 14s. 4d. The total costs of the liquidation, including the liquidator's remuneration, were £2,506 2s. 8d.; and preferential claims of £1,005 14s. 5d. had been discharged. Three dividends equalling 8s. in the £ had been declared on liabilities admitted amounting to £51,161 15s. 6d. Those dividends had absorbed £20,445 0s. 2d., and the liquidator pointed out that there was a balance at the bank of £3,015 17s. 1d. The probability was that a further dividend of 1s. in the £ would be paid from the balance in the bank, making a total dividend of 9s. in the £. The creditors passed an informal resolution approving of the liquidator's accounts.

Retail Pharmacists' Union

Executive Meeting

A MEETING of the executive committee of the Retail Pharmacists' Union was held at 19 Tavistock Square, London, W.C.1, on February 5. Mr. Leopold Joseph, J.P., was in the chair, and there were also present Messrs. Atkins, Bates, Clarke, Forster, French, Gilleghan, Hague, Hardy, Hindle, Jackson, Keall, Keith, Marshall, Martin, Matthews, Melhuish, Milner, Pickard, Ridyard, Rowsell, Tranmer and Young. The secretary reported that he had made inquiries as to the accuracy of burettes and pipettes used in analysis and the limits of error allowed. A letter from Mr. P. A. W. Self was submitted, together with a table showing maximum errors allowed. In accordance with a suggestion from the Birmingham branch, a Profits Subcommittee was formed to discuss "any action of retailers, wholesalers or manufacturers, which adversely affect the profit of the retailer."

FIRST-AID CASES.—It was ordered that a letter be sent to each firm mentioned on the Home Office list as supplying the first-aid equipment, protesting against their supplying direct to factory proprietors. The secretary was ordered to make inquiries regarding the possibility and advisability of a question being asked in the House of Commons in reference to the publication by the Home Office in their circulars of the names of firms supplying first-aid equipment, which practice is in the nature of advertising such firms.

INSURANCE DISPENSING.—Recommendations of the National Health Insurance Subcommittee which were adopted were as follows:—

That the inclusion of any advertisement or words such as "N.H.I. Dispensing" on labels should be strongly combated as being a breach of good conduct, and that the Ministry be approached by the R.P.U. to include a Regulation that no advertisement should be attached to labels for N.H.I. medicine bottles, and that advertising of N.H.I. dispensing or free gifts to induce insured persons to bring their prescriptions to a particular chemist, should not be allowed.

That a special meeting of the N.H.I. Subcommittee be called as soon as any communication from the Ministry is received, and that authority be given to the Committee to take any necessary action in connection therewith.

OTHER MATTERS.—The secretary was instructed to take the necessary steps "to obtain a legal definition of what constitutes a closed shop," and to memorialise the General Medical Council "to remove the note in the preface of the British Pharmacopœia which makes it uncertain whether apothecaries' or avoirdupois weights should be used in dispensing."

Exeter.—A meeting of the Devon Branch was held on January 23, Mr. W. E. Hollows presiding. No action has been taken by the Devon County Council with reference to the protest concerning the sale by them of tooth-brushes in the schools. It was resolved to press for reconsideration of the matter. A suggestion that the term "Union" does not commend itself to public bodies was referred to the South-Western Group Executive. A resolution that schemes of price protection outside that of the Proprietary Articles Trade Association are ineffective, and that concerted action be taken to oppose them was submitted to the South-Western Group Executive and to the R.P.U. Conference. It was resolved to ask the Pharmaceutical Committee to bring R.P.U. doctors' leaflets to the notice of panel chemists.

Hull.—At a recent meeting of the branch, at which Mr. R. F. Jones presided, Mr. Snowden reported on the meeting of the Group Executive at York. The proposal for an inclusive subscription of £2 2s., with unlimited indemnity, was supported. The regulations for labelling poisons are still undecided. The secretary read the circular describing R.P.U. services, and a discussion followed. It was suggested that there be limited hours for dispensing Insurance prescriptions, and the discussion will be resumed at the next meeting.

Leamington.—The Warwickshire Branch met at Leamington on January 10, Mr. Hutton presiding. A letter was read from a manufacturer of a proprietary article asking for the support of the branch on the grounds of increased profits, and it was resolved to accord such support providing the article was protected under the Proprietary Articles Trade Association regulations. The secretary gave a report of the meeting held in November, at which the Dangerous Drugs Act, non-P.A.T.A. price protection schemes, and the private marking of prescriptions were discussed and dealt with. The support of the branch was asked for proprietaries protected under the P.A.T.A. in preference to those privately protected, and to assist such preferential support some distinct marking was suggested. "Bishopgate" as a private mark on prescriptions was agreed to, if universally adopted. Mr. Nundy gave a report of the meeting of the executive, held in October, at Shrewsbury. The chairman commented on the success of the special meeting, held in November, and it was decided to hold a similar meeting in February, when it was hoped a local accountant would address the meeting on "Book-keeping as applied to Pharmacy."

B.P. Notes

By "Abel Scholar."

Olive and other Oils

This oil often contains unsaponifiable matter which, to a limited extent, is allowed. It is desirable, therefore, to filter the alcoholic potash solution of the saponified oil after warming and before leaving for the second period, in order that crystals, if present, may form. The B.P. is not consistent in its monographs of similar articles, and that of olive and other fixed oils is a case in point. *Oleum olivæ*, it states, "frequently assumes a pasty consistence when maintained for some time at a temperature of 10° C., and at a lower temperature may become a soft granular mass." Not a very definite sentence, surely. Under *Oleum arachis* nothing is said about this physical test. For almond oil, a modified test is recorded. *Oleum sesami* has no record, and *oleum ricini* is only "liable to solidify at low temperatures." If the test possesses any merit, should it not be more definite and extended to the other oils?

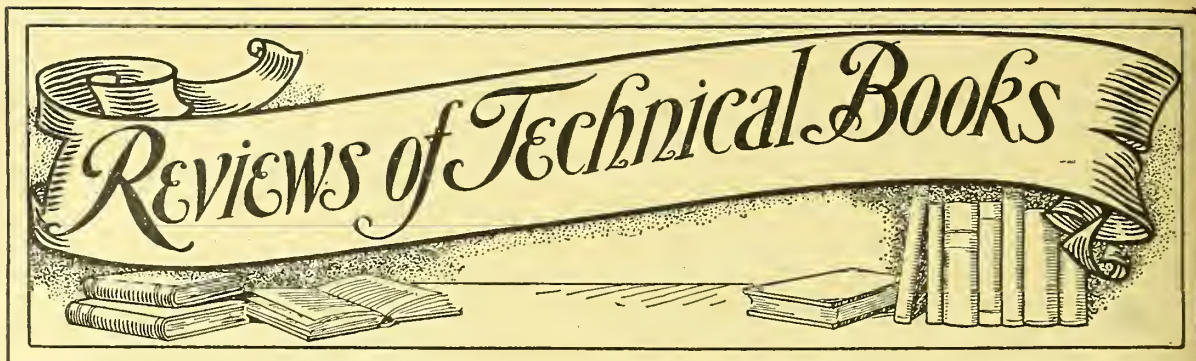
Pilula Phosphori.

No one has apparently as yet found an ideal formula. If *pil. phosphori* is ordered from any wholesale maker and dealer and the B.P. is not mentioned, analysis, if it could be accurately assured, would probably show a wide divergence of composition. Instead of following the precise way of safely weighing out the phosphorus in the subjoined formula and its successful transference to a dry mortar in which are contained the carbon bisulphide (20 m.) and *adepts lanæ* (20 grains), mix these intimately and proceed to add the calcium phosphate, previously weighing out 60 grains and put on a piece of paper. Draw on this as much as may be required to form a firm mass and note the weight of the remainder for future reference. This remainder will be about 15-15 grains, and the whole finished mass will weigh 67 grains or thereabouts (20+1+46). The mass is then divided by weighing into two equal halves, and each half is rolled into 15 pills, making 30 in all. The formula, therefore, is:—

Phosphori	...	...	gr. j.
Adipis lanæ	...	...	gr. xx.
Calcii phosphat.	...	...	q.s.
Carbon disulphid.	...	...	m. 20

M. Ft. *pil. triginta* (weighing about two grains).

It will be found that although the mass smells of phosphorus, at no part of the operation are fumes evolved. The student should note in passing that all apparatus must be scrupulously clean, and so must the fingers, to prevent the pills becoming dirty. When the pills were inserted in water-softening took place at 95-100° F.; there is no solution or true disintegration where such ingredients are used.



Reviews of Technical Books

Minor Maladies and their Treatment. By Leonard Williams, M.D. Fifth edition. $7\frac{1}{2}$ in. by $4\frac{1}{2}$ in. Pp. 414. 7s. 6d. London: Baillière, Tindall & Cox, 8 Henrietta Street, Covent Garden, W.C.

First brought out in 1906, this work now appears in a fifth edition. In a racy introduction Dr. Williams explains why he wrote the book, which was mainly because when newly qualified he found that although he knew all about the more serious ailments his knowledge was hazy on colds, indigestion, rheumatic conditions, and the like. The book is divided into ten chapters, the subject headings being (1) colds, coughs and sore throats; (2) indigestion; (3) constipation, diarrhoea, vomiting and giddiness; (4) rheumatism, neuralgia, headache; (5) goutiness; (6) minor glandular insufficiencies; (7) general health; (8) old age; (9) some drugs and their uses; (10) insanity. At the end of most of the chapters there are additional prescriptions for treatment, but, as will be seen, the book is somewhat limited in scope. Chapter 9 gives the pharmacology and therapeutics of eleven well-known drugs.

The Preparation of Perfumes and Cosmetics. By J. P. Durville, translated from the French by Ernest J. Parry, B.Sc. 10 in. by $6\frac{1}{2}$ in. Pp. 420. 21s. London: Scott, Greenwood & Son, 8 Broadway, Ludgate Hill.

This is a translation of the fourth edition of Durville's "Nouveau Formulaire des Parfums et des Cosmétiques." The book is divided into two parts, the first dealing with raw materials and the second with the manufactured articles. In the first section there is a chapter occupying forty pages dealing with the chief synthetic perfumes, ending with a useful table of solubilities. The part dealing with manufactured perfumery products is the chief part of the book, as it takes up 225 pages. It begins with aromatic waters, then deals with compound perfumes, toilet waters, cosmetics, skin creams, depilatories, smelling salts, incense, sachet powders, and toilet soaps. Following modern practice, many formulas contain synthetic products, and these are as a rule designated by correct names, and not by brand names. The book is founded chiefly on French practice, and the formulas are not always suitable for English use. Its utility to the practical perfumer will be in the suggestions it contains which are good bases for experiments in the production of perfect articles.

Chemical Synonyms and Trade Names: A Dictionary and Commercial Handbook. By William Gardner. 10 in. by $6\frac{1}{2}$ in. Pp. 271. 25s. London: Crosby Lockwood & Son, Stationers' Hall Court, Ludgate Hill, E.C.4.

An alphabetical list of synonyms and definitions of minerals, chemicals, dyes, explosives, pigments, alloys. Among the chemicals are many of special pharmaceutical interest. The shortened title of the work is apt to mislead, as the proportion of synonyms to definitions is about half, and a trade-name is mostly a synonym for a definite chemical. The author has displayed a great deal of industry in collecting and arranging the various items which make up the dictionary, but much of the

work is mechanical. As an example the following entry may be given:—

ANTIPYRINE. Phenyl-methyl-isopyrazolone or phenazone, $C_6H_5(CH_3)_2C_3HN_2O$. A febrifuge and analgesic.

Turning up other entries which we suspected might occur from the fact that they are to be found in large works on chemistry, we find the following:—

ANALGESINE (Anodynin). Antipyrine, $C_{11}H_{13}N_2O$, used medicinally to reduce temperature in fever.

METHOZIN (Phenylon). Antipyrine (phenyl-dimethyl-pyrazolone), $C_6H_5N(CO.CH)(N.(CH_3).C.CH_3)$.

PARADYN. Antipyrine (2:3-dimethyl-1-phenyl-5-pyrazolon. Used in the treatment of fever, neuralgia and rheumatism.

There are cross references under phenazone to antipyrine, anodynin to analgesine, phenylon to methozin, but otherwise the dictionary fails to give readily all the older synonyms for antipyrine. The diversity of chemical formulas and scientific names shown in the examples quoted will not help to clarify the information to junior chemists. As a chemical dictionary, however, the work may be helpful in putting a novice in chemistry on the track of the substance for which he is searching.

Allen's Commercial Organic Analysis: a treatise on the properties, mode of analysis, and proximate analytical examination of the various organic chemicals and products employed in the arts, manufactures, medicine, etc. Fifth edition. Edited by S. S. Sadtler, E. C. Lathrop and C. A. Mitchell. $9\frac{1}{2}$ in. by 6 in. Pp. 796. 30s. London: J. & A. Churchill, 7 Great Marlborough Street, W.1.

This work was originally written by Mr. A. H. Allen, the well-known Sheffield analyst. After his death, when the work had reached the third edition, it was arranged to allot the various sections to specialists, with the result that practically a new book resulted. The fourth edition was printed in the United States, as is the present revision, but the contributors and editors seem to be fairly evenly distributed between Great Britain and America. The collaboration of specialists in the English-speaking countries is an advantage, although occasionally difficulties occur because of the variation in standards and the legal position. As, however, the work deals mainly with methods of analysis there is less in this point than would have been considered. The first volume of the fourth edition appeared in 1909, so that there are many technical advances to incorporate. The introductory matter dealing with physical methods of analysis, as in the last edition, bears the name of Mr. W. A. Davis, but according to the preface it was revised by an American. The other sections are (1) alcohols, (2) malt and malt liquors, (3) wines and potable spirits, (4) yeast, (5) neutral alcohol derivatives, (6) sugars, (7) starch and its isomerides, (8) paper and pulp testing, (9) aliphatic acids. Sections 2, 4 and 5 are by the same authors as in the last edition. Aliphatic acids is the new title for the part formerly called "acid derivatives of alcohols"; it now includes lactic acid. There is no doubt that the work has undergone a thorough revision. In the case of the ethyl-alcohol

Reviews of Technical Books

section, for example, the alcohol tables of the U.S. Bureau of Standards take the place of Thorpe's tables, and isopropyl and butyl alcohol receive the attention they require now that they are so much employed as solvents in place of ethyl alcohol. This volume consists of 220 pages more than the previous issue.

Potter's Cyclopaedia of Botanical Drugs and Preparations.

By R. C. Wren, F.L.S., with additions by E. M. Holmes, F.L.S. Third edition. 7½ in. by 4½ in. Pp 392. 5s. net. London: Potter & Clarke, Ltd., 60, 62, and 64 Artillery Lane, London, E.

The author in the preface to the third edition of this invaluable guide to botanical herbs, roots, etc., in referring to the inclusion of 200 illustrations from Bentham's "Handbook of the British Flora," very modestly suggests that the extra amount charged for the Cyclopaedia will be found quite moderate considering its enhanced value. We can assure Mr. Wren that he need have no qualms on this account. Herbal remedies were man's first medicines, and these are still used to a great extent, especially in country districts, throughout the world. Every pharmacist is from time to time called upon to supply what is to him an unknown botanical preparation or drug. These range from agaric to jujubes, peppisew, and zedoary, and the chemist, wise in his generation, knows that his reputation is greatly enhanced if he can speak with knowledge on the uses, properties, preparation, and dosage of the medicine in question, and anyone possessing the Cyclopaedia, with its 3,000 references, will invariably refer to this first of all. The index at the commencement includes synonyms and prevents such items as heal-all being missed owing to paraphrasing as self-heal. Under each heading is given synonyms and parts used, with chapters on the action of the drug, preparations made therefrom, and its distinctive characters. All the information is necessarily compressed in character, but it is sufficient to indicate clearly in nearly all cases why and how the botanical substance is used. Perhaps it is inevitable that the therapeutic properties of some little used remedies should be over-stated, as "Avena forms an important restorative in nervous prostration and exhaustion after all febrile diseases, and as a tonic in spermatorrhœa, insomnia, etc.," Saffron . . . arrests chronic discharges of blood from the uterus"; modern opinion is turning against general statements covering too wide a range of symptoms and diseases. We should like to see (under "St. John's Wort") "useful in coughs, colds, consumption, and all lung diseases generally," pruned in accordance with modern therapeutics. Apart from the above criticism, which is intended to be helpful and not harmful, the Cyclopaedia fulfils its object admirably. It includes also an index of therapeutic actions, and forms of the "tisanes" and "species" in use on the Continent.

Handbook on Petroleum. By Captain J. H. Thomson and Sir Boverton Redwood. Fourth edition, revised and added to by Major A. Cooper-Key. C.B. 8½ in. by 6 in. Pp. 338. 12s. 6d. London: Charles Griffin & Co., Ltd., Exeter Street, Strand, W.C.2.

An addendum to the title of this volume states that it is for "Inspectors under the Petroleum Acts and for those engaged in the storage, transport, distribution and industrial use of petroleum and its products and calcium carbide." An equally good description would be "Everyone's Primer on Petroleum," the first portion being an exposition in non-technical language (but without the wealth of detail) of the invaluable information given in Redwood's "Treatise on Petroleum." Its interest to the world of commerce is due to sound guidance and commonsense interpretation of the legal technicalities connected with the testing and storage of petroleum. Thus in the first few pages the legal and commercial definitions of petroleum are shown to be indefinite, and even inconsistent, yet the authors convey precisely how limitations are prescribed by flash points

and addition of words to the generic term petroleum. The review of the theories of origin of petroleum, sources of supply, drilling, refining, etc., are admirable, and remarkable in that the authors are correct and up to date in their nomenclature of technical products used in such diverse industries as dry-cleaning and internal-combustion motors, as paint-driers or in pharmacy. Usually either the name or the product does not fit, or the data are years behind the times. Even the descriptions of "flash point" apparatus and "fire-tests" are rescued from "dryness" by a judicious mixture of history, intention, explanation, and application of this artificial but legal test, which should be judged "upon experience alone," and no alteration made "upon merely theoretical grounds." Comment is made upon the futility of stating the flash point of a liquid without adding the name of the instrument by which it is determined. The history and present position of legislation relating to petroleum occupies two chapters, and is followed by another on precautions necessary in connection with storage and transport of petroleum oil and spirit. Petroleum oil lamps, carbide of calcium, and acetylene are the concluding subjects of the book proper. There are also eighteen appendices (occupying 126 pages), giving the text of the Petroleum Acts, London County Council and Thames Conservancy regulations, and Orders in Council relating to petroleum, calcium carbide and explosives. It is this section which makes the book essential to sellers of the above products.

Glue and Gelatin. By Jerome Alexander. 10¼ in. by 6 in. Pp. 236. New York: The Chemical Catalog Co., Inc., 19 East 24th Street.

This book is one of a series of monographs on technological subjects issued by the American Chemical Society. The subject-matter is hardly what one would expect to find under the title, as the author is more concerned in dealing with the fundamentals of both characters and tests than in explaining the rule-of-thumb methods which apply wherever glue and gelatin are made and used. It cannot be said that the author provides a ready-made solution of the innumerable problems connected with these products, either solid and in solution; but he certainly goes a long way towards giving a clear idea of the basic considerations involved in dealing with such variable substances. The first chapter illustrates the difficulty of defining a "molecule" of gelatin, there being no line of demarcation between the chemical forces making one individual molecule and the physical actions grouping units into a chemical complex. Chapter 3 gives a method of making ash-free gelatin, but leaves us still doubting as to whether gelatin is a colloid or a crystalloid. Chapter 4 is given over to a question of whether gelatin is a distinct chemical entity, and the significance of hydrogen-ion concentration. In dealing with the structure of gelatin solution, the author gives a more definite picture of the physical processes involved in the cooling of a solution of gelatin. It is stated that in a heterogeneous mixture of complex groups, such as are found in gelatin solution or jelly, it is very unlikely that there is any definite arrangement of molecules into threads, chains, or strings. During a discussion of the various factors influencing the swelling of gelatin, an explanation is given of the Donnan equilibrium. Chapter 7 deals with the viscosity of glue and gelatin solutions. Thereafter follow chapters on tanning substances and the chemical examination of glue and gelatin. Chapter 11 deals with technical operations and manufacture of glue and gelatin under seven headings, from treatment of stock and boiling to packing and grading. This is one of the most valuable portions of the book. The work ends with sections on the uses of glue and gelatin, and on fish glue and isinglass. There is also an appendix giving the methods of testing glue and gelatin which have been agreed upon by the National Society of Glue and Gelatin Manufacturers.

Festivities

Thomas Tyrer's Staff Supper

THE annual staff supper of Thomas Tyrer & Co., Ltd., chemical manufacturers, Stratford, London, E., was held on February 11 under the chairmanship of Mr. P. H. Chambers. Mr. T. Tucker and Mr. G. T. Feasey, directors, were present. A programme of songs and music followed the supper, and an enjoyable evening was spent.

West Kent Pharmacists' Whist Drive

THE West Kent Pharmacists' Association held the annual whist drive at Beckenham, on February 6, when nearly 100 players assembled in the Railway Hotel, under the direction of the M.C., Mr. H. Wynter, Orpington. The prizes were presented by Mrs. W. J. Dalby. A cake made by Mrs. Cuthbert was competed for amidst excitement, and won by Mrs. Wallace Pring.

Ayrton, Saunders' Supper

ON February 11, the football club of Ayrton, Saunders & Co., Ltd., Liverpool, held a hot-pot supper at the Sandon Hotel, Liverpool. The Chairman was Mr. G. Reid, with Mr. W. H. Saunders as the honoured guest, and an enjoyable evening resulted. The musical programme was under the direction of Mr. Thomas, who called upon the staff for support.

Social at Blackpool

MEMBERS of the Blackpool Branch of the Pharmaceutical Society held their annual social and whist drive at the Palatine Hotel, on February 6. There was an attendance of over 100. Dinner was served under the chairmanship of the President (Mr. O. Gillibrand). There were two toasts, that of "The President," proposed of Councillor F. Boothroyd, and "The Ladies," submitted by Mr. J. Sankey. Mr. Harold Haw was director of ceremonies and Mr. J. Malley acted as M.C. during whist.

Glasgow Pharmacy Club Whist Drive

GLASGOW Pharmacy Club held a successful whist drive and tea in the Athenæum Restaurant, on January 29, when over 200 ladies and gentlemen were present. Mr. Harvey P. Arthur presided at the concert, and prizes were presented to the players by Mrs. Arthur as follows:—*Ladies*: Mrs. Don, Miss C. Gair, Mrs. G. Jarvie. *Gentlemen*: Mrs. MacSween, Mr. D. W. Blyth, Mr. J. S. Gowans. The musical programme was sustained by Miss Wilson, Mr. J. McBride Park, and Mr. R. Dickson; Miss Gair and Miss Winifred Beatson, A.L.C.M., presided at the piano.

Leeds Chemists' Whist Drive

THE Leeds Chemists' Association, on February 6, held a whist drive, a party of sixty members and friends assembling for an enjoyable evening. Play continued up to 9 p.m., when there was a break for supper, and the games were afterwards resumed. The prizes, given by the President (Mr. H. Roberts), the chairman of the Leeds Branch of the Retail Pharmacists' Union (Mr. M. E. Murray), and various members of the Council of the Chemists' Association, were awarded as follows:—*Ladies*: Mrs. Calverley, Miss Sanderson. *Gentlemen*: Mr. A. Winterbottom, Mr. Wood, Mr. Peters. The organisation of the affair was in the hands of the hon. secretary of the Association (Mr. Arthur W. Lupton) and a committee.

Dinner at Mansfield

THE annual dinner of the Chesterfield and Mansfield Branch of the Pharmaceutical Society was held on February 6, the President (Mr. J. A. Pegg) being in the chair. After the dinner special attention was called by the various speakers to the way in which both the scientific and business interests of pharmacy are now looked after by the Society and the Retail Pharmacists' Union. The annual meeting was then held, the treasurer's reports showing a balance in hand and an increase in

membership. Mr. Twelves, of Chesterfield, was elected *President* for 1924, with Mr. G. Briggs, of Sutton-in-Ashfield, as *Vice-President*, the retiring *Committee*, the *Treasurer* (Mr. B. Adams), and *Secretary* (Mr. W. O. Pegg) being re-elected.

Social Evening at Reading

AN enjoyable social evening was held by the Reading Branch of the Pharmaceutical Society on February 6, when over fifty members and friends, a large number of whom were ladies, assembled at the Central Café. Mr. Melhuish was introduced by the chairman (Mr. G. B. Osborne), and gave a brief address on the work and aims of the Pharmaceutical Council. Mr. Pitchford (Maidenhead) proposed a vote of thanks to Mr. Melhuish, and appealed on behalf of the Benevolent Fund, which resulted in the collection of the sum of 50s. An excellent musical programme was then given by the following: Mrs. Breakspear, Mr. Vasey, Mr. Hayes, and Mr. Alan Frame. The company then were regaled with light refreshments, and after an interval of twenty minutes the musical programme was resumed, with the addition of several dances.

Walthamstow Chemists' Whist Drive

THE Walthamstow Pharmaceutical Association held their annual whist drive on February 7. Prizes were distributed by Mrs. W. J. Beardsley to the winners, who were: *Ladies*: Mrs. Leighton, Miss Mayes, Mrs. Gray, and Miss Thomas; *Gentlemen*: Messrs. S. Down, A. M. Brown, Beard, and Gray. Mr. W. Gray (President) proposed a vote of thanks to the ladies, Mrs. Chapman, Mrs. Deeth, and Miss Gadsdon, who had been responsible for the refreshments; to the gentlemen who had contributed to the funds; and to the donors of the prizes, Ashton & Parsons, Ltd., J. C. Eno, Ltd., Hodgkinson, Prestons & King, Mr. W. Beard, and Mr. Sawdon. Messrs. Deeth, Thomson and Willcocks acted as M.C.s. As a result of the whist drive it is anticipated about £15 will be sent to the treasurer of the Benevolent Fund. A box of chocolates twice auctioned realised 46s. for the fund.

Masonic Pharmacists' Dinner

THE Manchester Pharmaceutical Masonic Association held the second ladies' evening of the season on January 30 at the Victoria Hotel, Manchester, when a company of fifty were received by the chairman (Bro. A. Newton) and Mrs. Newton. Among those present were Bro. T. Leigh Bennett, who acted as D.C., and Mrs. Bennett, also the secretary, Bro. H. Woodhead, and Mrs. Woodhead, Bro. A. Crossley and Mrs. Crossley. Other tables were in charge of past chairmen, Bro. H. Thompson, with Mrs. Thompson, and Bro. J. H. Nidd with Mrs. Nidd and Miss Nidd. Bro. Darbyshire proposed the health of "Our Chairman," which was enthusiastically received, and "The Ladies" was given by Bro. G. Middleton, to which Mrs. Newton happily responded. Following the dinner was a novel whist drive conducted by Bros. Bennett and Woodhead, during which many amusing prizes were awarded. The prize winners were: Mrs. Peace, Mrs. H. Bridgford, Mrs. Taylor, Bro. H. Thompson and Mrs. Woodhead. A dance followed.

Leicester Chemists' Annual Dinner

THE annual dinner of the Leicester Branch of the Pharmaceutical Society of Great Britain was held on February 7. Mr. S. S. Squires (chairman), who presided, proposed "The Pharmaceutical Society," and Mr. E. T. Neathercoat responded. He said Leicester and its pharmacists had always had a very close association with the Society at headquarters. Leicester had produced some well-known pharmacists, including one of the most valued members of the Board of Examiners (Mr. A. E. Yonng). Also, on many occasions, Leicester had sent young students who had captured many of the prizes of the Society. He thought Leicester had won one out of every five of the "blue ribbon" prizes in pharmacy. On behalf of the Society he acknowledged the support which had been given by the pharmacists of Leicester and Leicestershire. The development of the

branch movement would go a long way to keep the Council in touch with pharmacists who were carrying out a most important work in connection with the health of the nation. When the latter fact was known by the public there would be a greater appreciation of the work of pharmacists. Mr. A. E. Young submitted "The Medical Profession," and Dr. Macleod delivered a witty speech in reply. The doctors, he said, were nobly and splendidly backed up by the pharmacists. They emerged from the dark ages together. (Laughter.) Mr. A. H. Spiers proposed a toast to the ladies and visitors, and Mr. G. Kirk responded. The company were excellently entertained by Miss Marjorie Moss, Mr. T. C. Peberdy, Mr. L. Smith, and Mr. J. Goddard.

British Optical Association Dinner

THE annual dinner of the British Optical Association was held at the Waldorf Hotel, London, W.C., on February 13. The guests, numbering nearly eighty, were received by the President (Mr. W. B. Barker, F.B.O.A. hon.) and Mrs. Barker, and included Messrs. O. Aves, F. W. Bateman, Dr. R. S. Clay (Northern (London) polytechnic), Dr. Max Coque (British Optical Institute), J. Harcombe Cuff, F. W. Dadd, A. Gow (Imperial College of Science), J. McHoul, F.R.C.S., Dr. Quine (Ministry of Health), and J. H. Sutcliffe (registrar, British Optical Association). Following an excellent repast and the loyal toast, Mr. R. J. Mellor, M.P., proposed "The British Optical Association." He said he understood that certain aspirations were contained in a draft charter, among the objects of which were the encouragement of the science of optics and its application to the improvement of human vision. Expressing the view of an outsider, he believed in the character of the men who composed the committee and that their aspirations were true and sincere, and in wishing the Association success in obtaining their charter, pointed out that they were up against an old profession. The President, in his reply, declared that in the forefront of the Council's objects was one to provide a proper service. During the past year the Association could claim to have widened and raised the standard of its examinations, which was all to the benefit of the public. One of the reasons for the charter was to control the members and to put charlatans out of the business. Facilities for students and post-graduate schemes of study had also made great strides of late. The Foundation lecture had been instituted to stimulate opticians to go in for research. The next one is to be given by Sir Arthur Keith, F.R.S. Mr. W. E. Charnley, in proposing "The Guests," considered that the index of prosperity of the Association might be measured by the increase in membership and the number and the distinguished character of the guests. Unless they had the interest and help of those outside, there would be no progress. They had not achieved all they set out to achieve, but were well on the way; at any rate, the Council could hardly be accused of not trying to obtain a charter. There is a great deal of work to be done in educating the public in the care of eyesight, about which at present great indifference is often shown. Professor G. Elliott Smith, F.R.S., M.D., Professor of Anatomy in the University of London, in response, pointed out that research means clearer vision. Research is probably appreciated more in this country than any other, and many of the most important discoveries have been made by our countrymen, yet the results have been chiefly exploited by other countries. Progress depends on perfection of craftsmanship, and the discoveries of new methods. His studies had made him realise that the great difference between man and other creations lies not merely in changes in the brain but in the eyes. Owing to the absence of Professor Alan Pollard, Major Henrici replied on behalf of the Optical Society of London, and Mr. E. A. Archer on behalf of the Association of Wholesale Manufacturing Opticians, of which body he is chairman. The latter spoke of the satisfaction of the wholesalers at the formation of the Joint Council of Qualified Opticians, and of their faith in the future of the industry. The efforts of the British Optical Association to raise the status of the optician were much appreciated, but they deprecated the tendency to an increasing number of examinations, which would

not help the industry. (Hear, hear.) Mr. G. E. Houghton, chairman of the Institute of Ophthalmic Opticians, who also responded, mentioned that the outstanding work on behalf of the public and the opticians had been the co-operation between the B.O.A. and the Institute and between these two bodies and the wholesale opticians. The speeches were followed by a novel form of entertainment in which a mannequin show was interspersed with an excellent variety programme, and dancing commenced about 10.30 p.m.

S.A. Medicine Stamp Tax

THE Associated Pharmaceutical Societies of South Africa have launched a campaign for the repeal of the Medicine Stamp Act, and it is meeting with a considerable measure of success. Literature is being circulated throughout the Union to all members of Parliament, chemists and druggists, and editors of newspapers. These pamphlets are backed up by a poster to be placed in each chemist's window, and a petition which can be signed in the shop is also being circulated. These petitions will then be collected, and each member of Parliament will then be asked to present the petition from his district, so that the document will be impressive, and the Government will see that repeal is the universal wish of the people. The poster to be exhibited in the shop window is 25 in. by 20 in., the lettering being in large block type, and is as follows:—

MEDICINE TAX

SIGN PETITION

WITHIN AS

PROTEST

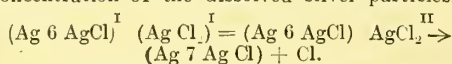
AGAINST

TAXING THE SICK

The author of the pamphlet (in English and Dutch) is Mr. M. Cassell, secretary of the Associated Pharmaceutical Societies of South Africa, and he brings forward some excellent reasons as to why the medicine stamp tax should be repealed. Nearly a year has gone by since this measure became law, and the opposition has increased daily. The pamphlet shows some of the underlying fallacies of the measure and points out the anomalies and injustice of its application. A few of the anomalies and interpretations are appended. Quinine is an official B.P. drug, but if it is put up for sale and any reference is made on the label to any of the diseases or conditions for which it is used it is classed as a patent medicine, and the purchaser is liable for payment of stamp tax. Liquid paraffin is a B.P. article and malt extract is a B.P.C. one. Both are allowed to be sold without a stamp, whether branded or not, but if mixed the Department hold they must be stamped if sold under a brand name or labelled with any reference to the medicinal use of the preparation. Dutch medicines so-called are specially exempted from stamp, but if such medicines are labelled in English as well as Dutch the Department hold they must be stamped. This is regarded as too absurd for discussion, and contrary to common sense. Woodward's Gripe Water, Elliman's Embrocation, and Steedman's Soothing Powders, which are proprietary and secret remedies, are exempt, which shows another anomalous interpretation of the Act. Many other instances are adduced, in addition to which there is no authoritative ruling obtainable from the Department as to what does and what does not come under the Act, and it is left to the officers of the Department, who are destitute of any knowledge of what constitutes a medicine, to decide on the spot what is liable. They assess and collect from the chemist any sum they think fit under what is called a "deposit" to cover the amount of revenue concerned. Finally, every chemist is asked to put his shoulder to the wheel, as upon their efforts depend the success or failure of the campaign.

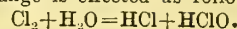
Chemistry of the Photographic Plate

PROFESSOR G. T. MORGAN, F.R.S., head of the Chemistry Department of the University of Birmingham, delivered his presidential address on *The Chemistry of the Photographic Plate*, before the members of the Chemical Society of that University, on January 21. In an historical introduction to the photo-chemistry of silver salts, Professor Morgan referred to the early experiments made by Fabricius (1556), Scheele (1777), and by Wedgwood and Davy on the action of light on the silver halides (1800-1802). The production of a permanent picture was achieved by J. N. Niépce (1813), who noticed that light rendered insoluble the bitumen of Judea, whereas the unexposed portion was removed by organic solvents. Daguerre (1835) introduced the method which still bears his name, Daguerreotype. The discoveries by Talbot and Herschel (1839) led to the improved Calotype or Talbotype process (1841), a procedure which involved the use of sensitisers and developers. Herschel's contributions were of fundamental importance, including the employment of hyposulphite (thiosulphate) for fixing and the discovery of the blue print and platinotype processes. The wet plate collodion process discovered by Scott Archer (1851) was superseded by the dry plate or emulsion process, introduced by Maddox (1871) and improved by Wratten (1876). Discussing the action of light on silver halides, Professor Morgan observed that Scheele's experiment showed that chlorine is liberated when light falls on silver chloride. The Italian investigator, Trivelli, has suggested that the solid chloride is Ag_6Cl_6 , and that chlorine is liberated from this polymeride until the product Ag_6Cl_4 is reached which on analysis would give the data for the assumed subchloride Ag_2Cl . It is at least possible that silver may become temporarily bivalent under the influence of light; then the AgCl_2 radicle becomes saturated as AgCl_2 , and this unstable dichloride evolves chlorine, with the result that the co-ordination compound becomes a solid solution of Ag in 7AgCl . This part of the chloride is in a labile undissociated condition, and the silver being in a colloidal state, the colour of the so-called photo-salt depends on the size and concentration of the dissolved silver particles.

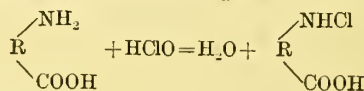


On more prolonged exposure this process is repeated, more chlorine being absorbed by the sensitiser until the stage 4Ag , 4AgCl is reached, corresponding with the assumed subchloride Ag_2Cl . During the ripening of the emulsion for the dry plate the particles segregate, and this increase in size is accompanied by an increase in sensitiveness. The process of aggregation is probably a chemical one; the slight excess of potassium bromide has a solvent effect on silver bromide, especially in a fine state of division, and the solution of KAgBr_2 deposits AgBr on the larger particles. This chemical theory of aggregation is supported by the fact that ammonia has also been used successfully as a ripening agent. Referring to the effect of sensitisers facilitating the photo-chemical change in silver halides and other substances, Professor Morgan pointed out that silver nitrate interacts with the halogen given off during photo-chemical change, and free nitric acid and oxygen have been indicated as products of this reaction. With a gelatin emulsion the medium acts as the sensitiser, and hence excess of silver nitrate is no longer required. Gelatin, which has a considerable affinity for chlorine and bromine, will absorb 20 per cent. of its weight of the latter from bromine water, yielding brominated compounds. In the gelatin-bromide plate the slight excess of iodide is suggestive, as BrI is an efficient brominating agent. Thoroughly dry silver chloride does not undergo photo-chemical change on exposure. The presence of moisture is essential.

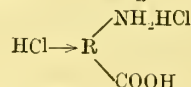
Possibly the change is effected as follows:—



It is known that the amino acids form chloroamines,



And another portion of the gelatin takes up the



In this way the gelatin assists in the removal of halogen from the silver halide. The foregoing suggestion is of interest in connection with the well-known fact that the latent image disappears when the film or plate is kept for some time before developing. The chloroamine reaction is known to be reversible; the chlorine thus regenerated attacks the photo-salt, so that silver chloride is reproduced and the image is destroyed. The decomposition of a chloroamine is promoted by hydrochloric acid, and this acid is known to assist in the destruction of the latent image. It may be inferred with considerable certainty that the altered product in the development of the latent image is of the same kind, but differing only in degree from the discoloured photo-salts. The proof of this identity lies in the fact that those substances, such as mercuric, stannic or ferric salts, which restrain the formation of photo-salts, diminish enormously the sensitiveness of a photographic plate. In the dry emulsion plate there is no excess of silver nitrate, and accordingly a more powerful developer is required than in the wet collodion process. Alkaline pyrogallate reduces the silver halides, and would reduce the silver bromide all over the plate except for the presence of a restrainer such as potassium bromide. The reducing action of ammoniacal or alkaline pyrogallate takes place first on the silver bromide in contact with the reduced silver produced photo-chemically. Possibly the unchanged co-ordination compound (Ag_6AgCl) (AgCl) is more resistant than the solid solution of silver in depolymerised silver chloride formed by its photo-chemical decomposition. It must, however, be admitted that chemical theories hardly explain all the phenomena of development. A latent image can be developed by pressure only, and without exposure. When used as a developer, ferrous oxalate is oxidised to ferric oxalate by the bromine, which it withdraws from the silver bromide associated with the photographic reduction product, whereas the unaltered silver bromide is not affected, owing to the restrainer. In the developing processes the determining factor is the heat of formation of the halogen hydride. Silver iodide requires the strongest developer, and silver bromide requires a stronger developer than silver chloride. In gelatin emulsion processes the order of sensitiveness is bromide, chloride, iodide, which is inversely as the order of the affinity of the halogens for oxygen and other electro-negative elements. Concerning intensifiers, this effect is produced in the collodion plate by adding a reducing agent, ferrous sulphate or pyrogallol, to which a little silver nitrate is added just before use. In the gelatin plate, intensification may be brought about by mercuric chloride; this salt is reduced and at first bleaches the negative, and the bleached plate is then intensified by ammonia. Ferrous oxalate is a good intensifier for the plate after bleaching with HgCl_2 , because it reduces both chlorides to AgCl and Hg_2Cl_2 to the metallic state. When the plate is over-exposed a partial removal of reduced photo-salt is required. The chemicals which weaken the negative are those known to dissolve metallic silver. The chemical processes involved in printing and toning, as well as in fixing and intensifying, were explained by means of specially devised experiments. The more modern applications of the platinotype and carbon-printing processes were reviewed, and a brief reference was made to the chemistry of the processes used in colour photography, this branch being illustrated by a representative series of coloured photographs.

Pharmaceutical Botany

XLIV. Rosaceæ

THE rose order, or *Rosaceæ*, is a stumbling-block to students who seek cut-and-dried characteristics for each natural order. The bounds of closely allied orders (including the *Rosaceæ*) may be incapable of clear demarcation. The rose order itself contains herbs,



FIG. 145.—*ROSA CANINA*

shrubs, or trees, usually perennial and possessing alternate stipulate leaves. The flowers usually have five (or four) sepals and petals, but the stamens are numerous and inserted with the petals on the calyx tube or thalamus (perigynous). The indefinite number of stamens and their perigyny serves to distinguish most members of the rose order. The types of fruits resulting from perigyny in the *Rosaceæ* were illustrated in Fig. 100 (Article XXX).

The dog-rose, hip-tree, or wild briar (*Rosa canina*, L., Fig. 145) of our hedgerows is typical of the order.

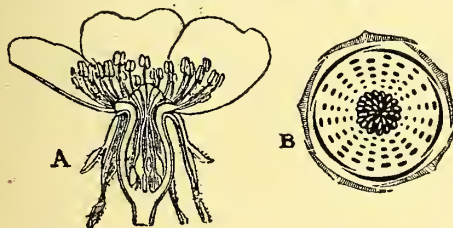


FIG. 146.—FLOWER OF DOG ROSE
A. Longitudinal section. B. Floral diagram

The straggling stems bear recurved or hook-like prickles, and may attain six feet or more in length. The smooth leaves are compound, each leaf consisting of two to four pairs of leaflets with a terminal leaflet, all having saw-tooth-like (serrate) margins. At the base are two pointed outgrowths (stipules) which adhere (or are adnate) to the leaf stalk for about half an inch. In the flowers (Fig. 146) which are borne on smooth stalks (or peduncles), the calyx-tube and cup-shaped thalamus merge imperceptibly into one another. The free limbs of the persistent calyx are five in number and bent back (or reflexed). The sweet-scented corolla consists of five

pink or white spreading, slightly incurved petals arranged in a rotate manner (so-called rosaceous). These, and the numerous stamens which are incurved in bud, are perigynous. The interior of the cup-like receptacle is lined with numerous carpels, with long styles projecting to the mouth of the tube, which is thus filled completely. On ripening the walls of the cup-shaped thalamus become smooth, red in colour, and succulent, forming the spurious fruits known botanically as cynarrodia, and commonly called "hips." The pounded hips, freed from the small, hard, hairy "seeds" (which are the true fruits, being achenes), and preserved with sugar, form confection of roses, still used occasionally in pharmacy as a pill-exci-pient (as also conf. rosæ gallicæ below). There are many varieties of dog-rose, but the other common British wild rose, the field rose (*R. arvensis*) is readily distinguished by its trailing habit and its white scentless flower with protruding styles. The products of other species of rose are used in pharmacy. The dried petals of the red or Provins rose (*R. gallica*) provide red colouring matter for inf. rosæ acid. and syr. rosæ. The fresh petals



FIG. 147.—*PRUNUS LAUROCERASUS*

beaten together with sugar form conf. rosæ gall. Otto of rose is obtained from the petals of sweet scented roses such as the Damask rose (*R. Damascena*) by distilling them carefully with water, the oil floating on the surface of rose water also produced. French rose water (aq. rosæ triplex) is often distilled from the petals of the cabbage or hundred-leaved rose (*R. centifolia*).

The genus *Prunus* differs from *Rosa* in the calyx being deciduous and having only a single carpel, which becomes a drupe when ripe.

The cherry laurel (*Prunus laurocerasus*, L.) is indigenous to Persia and Asia Minor, but is cultivated in this country as a decorative shrub. Under natural conditions it is a small evergreen tree arising about fifteen to twenty feet, with long, spreading branches covered with smooth blackish bark. These bear simple oval leaves with short stalks and of stout leathery texture, known as "coriaceous." The pointed apex of the leaf is bent back, while the serrated margin is also turned under (recurved) so that the strong teeth are not visible from the dark-green glossy upper surface, but can be felt by running the finger along the edge of the under surface. The leaves are quite free from hairs, and afford a good example of pinnate venation, the strong lateral veins leaving the midrib at an angle of almost

60° and curving gradually upwards towards the margins. The under surface of the leaf bears from one to four depressions near the leaf base, which are the remains of sugar-secreting glands on the young leaf. Such foliar nectaries are well developed in certain "ant-loving" plants, the secretion being food in return for the policing against attacks of other more destructive insects. The small, white, strongly odorous flowers are borne in simple racemes in the axils of leaves. The calyx is five-lobed, the petals number five, while the numerous stamens are inserted on a saucer-shaped calyx-tube (perigynous). The drupaceous fruit resembles a small black cherry in size and structure. The botanical term for the skin of a drupe is epicarp, the pulp being the mesocarp, the endocarp being the stony coating enclosing the seed or kernel; collectively the three are termed pericarp (*epi*=upon, *meso*=middle, *endo*=within, *peri*=around, and *carp*=fruit) (see Fig. 100). Cherry-laurel leaves contain a ferment termed prunase and a glucoside (prulaurasin or mandelonitrile glucoside) closely allied to the amygdalin of bitter almonds. Emulsin is a mixture of the ferments amygdalase and prunase.) As with the mustard, glucoside and ferment are stored in separate cells, the latter being stored in cells sheathing the veins and the former in the body of the leaf. By bruising the leaves and moistening, as in the preparation of cherry-laurel water, the enzyme is brought into contact with the mandelonitrile glucoside, resulting in the formation of benzaldehyde, hydrocyanic acid and dextrose. An important discovery is that ferments such as emulsin are able to synthesise glucosides as well as decompose them, the reaction resembling that of a reversible chemical reaction, in which the course of change depends upon which of the products of the reaction is removed. Furthermore, it is now believed that organic nitrogenous compounds (proteins, alkaloids, etc.) formed in the leaves are removed therefrom as soluble glucosides. Wild cherry bark or Virginian prune bark is derived from *Prunus serotina*, Ehrh. Prunes are the dried fruits of cultivated varieties of the plum tree (*Prunus domestica*).

Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of British patents can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

Tonic Pills.—Pills containing equal parts of hiera piera, jalap and bitter aloes, moistened with brandy, the resulting paste being dried at 45° to 60° C. (R. Clissold. 209,457.)

Organotherapeutic Preparations.—A process for preparing a solution of glandular substances for oral administration consisting in submitting the glands to artificial digestion in an acid solution of pepsin at 45° C. The resulting liquid is filtered, chloroform added as a preservative, and oil of cinnamon as a flavouring agent. (C. H. B. Bradley. 191,740.)

Tobacco Pipe Cleaner.—An absorbent material is treated with an aqueous solution of ammonium molybdate (4 to 5 per cent.), whereupon it is given the usual form and provided with a wire core. In use the cleaner is inserted in the pipe and left for some hours, during which the ammonium molybdate collects the nicotine and the pyridin bases present. (E. J. Mortimer. 209,550.)

GERMANY

Disinfectant.—A process for preparing a disinfectant consisting in an emulsion of furfural (5 per cent.) prepared by means of a solution of casein. (Aschkenasi. D.R.P. 389,422.)

Hydrolecithin.—A process for hydrating lecithin, consisting in submitting a solution in a suitable non-aqueous medium to the action of hydrogen in the presence of a catalyst. (J. D. Riedel A.G. D.R.P. 389,298/99.)

Window Steaming.—A preparation to prevent the condensation of water on glass surfaces, consisting of a mixture of spirit of soap 20, alcohol 40, and glycerin 70 parts, by weight. (Bavaria G.m.b.H. D.R.P. 388,880.)

Chemical Society

Six papers were read at the meeting held on February 7 in Burlington House, Piccadilly, London, W., the President, Professor W. P. Wynne, F.R.S., in the chair. The activity of hydrogen ion in aqueous solutions of hydrofluoric acid formed the subject of a communication by Mr. W. F. K. W. Jones (with Mr. L. J. Hudleston), in which the experimental method adopted and the results obtained were described. Wax vessels were used and hydrogen bubbled through the hydrofluoric acid, the chief difficulty arising from the recurring poisoning of the platinum electrode, possibly due to the presence of traces of mercury carried along from one of the cells. A saturated solution of potassium chloride was used as a junction, and the possibility of a potential difference at the liquid junction, influencing the results, was discussed. Dr. N. V. Sidgwick (with Mr. R. K. Callow) presented two papers; with reference to the first, *The Solubility of the Aminophenols*, he briefly stated that the aminophenols are abnormal; the meta compound is more soluble in water than might be expected and readily forms supersaturated solutions. In his second communication, *Abnormal Benzene Derivatives*, Dr. Sidgwick discussed the results of a study of the volatility and solubility, and of the cryoscopic behaviour, of a number of isomerides of this series. Large differences were found in volatility and solubility between the meta, ortho and para isomerides. The nature of the abnormality depends on the presence of two active groups, i.e., COOH, OH, NH₂, CHO, whereas CH₃ is inactive. The ortho derivatives of phenol are more volatile and more soluble in benzene, but less soluble in water, than is the case with the corresponding meta and para derivatives. In substituted phenols the ortho compounds are non-polar, and an explanation of their abnormal behaviour might be found in the possible occurrence of ring formation, whereby the associating power of the OH in the ortho position would be destroyed, a view which was exhaustively dealt with by the authors, and its effect in raising vapour pressure. In their paper, *The Conductivity and Ionisation of Solutions of Potassium Iodide in Nitromethane*, Professor J. C. Philip (with Mr. H. B. Oakley) discussed the effects of temperature, viscosity and concentration on conductivity and ionisation, using a solution of potassium iodide in nitromethane, dealing particularly with the estimation of the limiting value of conductivity. The relationship between viscosity and conductivity was found to be directly proportional; also, it was established that with increasing temperature the degree of ionisation decreases. The observation has been made that two hydrates separate from solutions of sulphanilic acid, and although unstable, are sufficiently persistent to enable a determination of their solubility curves. The results of these investigations were presented in Professor J. C. Philip's second communication (in collaboration with Mr. R. S. Colborne) on *The Solubility of Aniline Sulphonic Acids*. On separating from a saturated solution, *p*-bromaniline-*m*-sulphonic acid yields a mass of crystals of a labile monohydrate, which on standing are gradually replaced by crystals of the less soluble anhydrous acid, Professor Philip demonstrating the process. In the anhydrous form this acid is obtainable in rhombic and monoclinic crystals, and the solubility of both varieties was discussed. *The Mercuration of Nitrohydroxybenzaldehydes* formed the subject of a paper presented by Dr. T. A. Henry (with Mr. T. M. Sharp), in which the mercuration of the three forms of nitro-*m*-hydroxybenzaldehyde was described, yielding mono- and di-mercured compounds which can be separated by fractional crystallisation from certain fatty acids. The position of the mercury can be ascertained by replacing it by iodine, with which these compounds react, whereas bromine shows a different behaviour. An investigation of the bactericidal action of these bodies showed that the mono-mercury compounds possess a more powerful effect than the corresponding di-mercury compounds, and the toxicity to *B. typhosus* of solutions of various concentrations was shown by means of slides.

Personalities

MR. A. W. HUDSON, chemist and druggist, has been elected President of the Craubrook Tradesmen's Association.

THE London representative staff of Ayrtton, Saunders & Co., Ltd., has been augmented by the addition of Mr. G. E. Lawes.

MR. L. A. GARRATT, London representative of C. R. Harker, Stagg & Morgan, Ltd., manufacturing chemists, has removed to 2 Duuvegan Gardens, Eltham, S.E.9.

MR. C. F. HOTZ, of the Pharmaceutical Department, The Sandoz Chemical Co., Ltd., Basle, Switzerland, will be visiting London about February 16.

MR. ERIC TITTERINGTON, private chemist to the King of Egypt, has been granted permission to wear the decoration of the Order of the Nile, fourth class.

MR. THOMAS SWALES, Butts Court, Leeds, who was taken ill with bronchitis at Grimsby recently, has returned home, and hopes to resume his journey in the East Riding shortly.

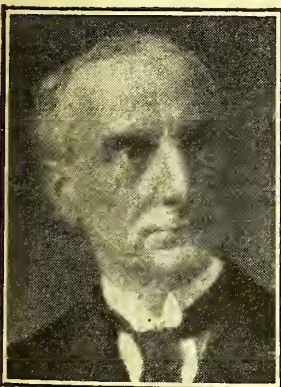
M. A. BLANQUÉ, a partner in the firm of Bruno Court, manufacturers of raw materials for soaps and perfumes, Grasse (represented by W. H. Hobbs & Co., Ltd.), is at present in London on a short business visit.

MR. AND MRS. W. E. D. SHIRTLIFF, Goldhawk Road, London, W., celebrated their silver wedding on February 1. Mr. Shirtliff is ex-President of the Western Pharmacists' Association, an office that he held in 1917-18 and in 1921-23.

MR. W. CLARKE, a director of Francis Cupiss, Ltd., veterinary medicine manufacturers, Diss, who has completed fifty years with the company, has been presented with a silver tea service. The presentation was made by Mr. A. Cupiss, Walsall, grandson of the founder of the business and chairman of the directors.

MR. JOHN GEORGE TWIGG, chemist and druggist, Withernsea, the newly-elected President of the Hull

Chemists' Association and the local branch of the Pharmaceutical Society, was apprenticed at Lincoln, of which city he is a native. He qualified in 1899, and then became dispenser and surgeon's assistant at Lincoln General Hospital. In 1902 Mr. Twigg commenced business in Withernsea, where, with medical experience as a business asset, he has become very popular. Mr. Twigg is a member of the Urban District Council, and a churchwarden of St. Nicholas' Church; the latter position he has held for fourteen years. He is also a



Mr. J. G. Twigg

member of the Holderness Lodge of Freemasons. His eldest daughter qualified in 1920, and is assisting him in business.

THE Edward Terry Lodge recently held a ladies' night in the Connaught Rooms, London, W.C., Mr. W. J. Royle, W.M. (John W. Royle, Ltd.), occupying the chair. The welcome extended to the ladies was replied to on their behalf by Mr. Alban Atkin, S.W., in an amusing speech. Among others connected with pharmacy who were present were Messrs. A. R. Arrow-smith (Apollinaris Co., Ltd.), A. Proctor Atkinson (J. C. Eno, Ltd.), Thomas Batey (London Insurance Committee), P. Barrs, E. C. Evans, Lloyd Evans, W. B. Falding, D. Grant, W. Rooke Roberts, P. O. Royle (Ingram & Royle, Ltd.), W. E. D. Shirtliff, W. C. Tarry, and J. R. Truman. Dinner was followed by a concert, whist drive and dance.

Births

Notices for insertion in this column must be properly authenticated.

ARNOLD.—On January 24, the wife of R. J. Arnold, M.P.S., 14 Allhalland Street, Bideford, of a daughter.

Marriages

LAYFIELD—PICKLES.—At St. John's Church, Wors-thorne, Burnley, on February 6, John William Layfield, chemist and druggist, Lyndhurst Road, to Elizabeth Annie Pickles, Bryn Hey.

Deaths

BAKER.—At his residence, 19 St. John's Street, Chichester, on February 4, Mr. Samuel Baker, retired chemist and druggist, aged seventy-five. Mr. Baker was born abroad while his father was on active service as a hospital sergeant in the Crimea. In 1861 the father quitted the Army and established himself as a chemist and druggist in Eastgate Square, Chichester, where his son became associated with him in due course as partner. Mr. Baker, senior, lived to the venerable age of eighty-five, and on his death in 1902 his son became the sole proprietor of the business (*C. & D.*, 1, 1902, p. 550). In 1909 he took Mr. G. F. Bevis, chemist and druggist, into partnership, and four years later Mr. Bevis, on Mr. Baker's retirement, acquired his interest. Mr. Baker was much interested in botany, especially the flora of Sussex; he was also a Volunteer, a Freemason, and a founder of the Chichester Cycling Club. He is survived by a daughter.

DUCKWORTH.—At Hazel Bank, Blackburn, on February 12, Mr. J. R. Duckworth (Duckworth & Co., manufacturing chemists, Chester Road, Manchester), aged sixty-nine.

HALLAM.—At "St. Gertrude's," Hampton Road, Worcester Park, Surrey, on February 7, Mr. George Hallam, representative of Arthur H. Cox & Co., Ltd., manufacturing chemists, Brighton. Mr. Hallam joined Messrs. Cox's staff in the early days of the war, taking the South and South-West of England as his ground. He was laid aside with heart trouble last October, and during his illness Mrs. Hallam successfully undertook his journeys. His whole interest was centred in his work, in which he was assisting till the end.

JONES.—At 136 Warbreck Moor, Aintree, Liverpool, on February 7, Mr. Charles Edward Jones, chemist and druggist, aged fifty-five. Mr. Jones was a member of the Liverpool Chemists' Association, and served on the local Insurance Committee. He leaves a widow.

MONK.—At 142 Langworthy Road, Seedley, Manchester, on February 9, Mr. Cyril Wadson Monk, M.P.S., 180 High Street, Pendleton, and branches, aged thirty-five. Mr. Monk was a native of Burnley, where he was trained by Mr. F. P. Pick, Ph.C. After qualifying (in 1913) Mr. Monk commenced business in Hastings, subsequently removing to Manchester.

ROBERTS.—At Boscombe, Hampshire, recently, Mr. F. G. Adair Roberts, J.P., vice-chairman of A. Boake, Roberts & Co., Ltd., manufacturing chemists, Carpenters Road, Stratford, London, E.15, aged eighty-one. Mr. Roberts was associated with his company for nearly fifty years.

THOMAS.—At the Monastery Nursing Home, Sea Point, Cape Town, on November 10, 1923, following an operation, Mr. William John Henry Thomas, chemist and druggist, aged forty-four. Mr. Thomas was born in Tenby, South Wales, and for several years carried on a successful business in Shortmarket Street, Cape Town. He was a prominent Freemason. The funeral was largely attended by members of the drug trade and by many brother-Masons. Mr. Thomas is survived by a widow and three sons.

Trade Notes

CONTESSA-NETTEL CAMERAS are imported by Hunters, 39 and 40 Doughty Street, London, W.C.1.

RADIO PACK is a substitute for hot-water bottles, over which it offers advantages as stated in the announcement in this issue of S. Guiterman & Co., Ltd., 35 Aldermanbury, London, E.C.2.

NUCTONE.—James Stewart, Ltd., 80 New Bond Street, London, W.1, announce a new size of Nuctone (for grey hair) retailing at 3s. 9d. per bottle. Particulars are given in our advertising pages.

FIRST-AID CABINETS.—Southall Bros. & Barclay, Ltd., 19, 20 and 21 Lower Priory, Birmingham, issue a catalogue of first-aid cabinets as required to be kept in factories under the Workmen's Compensation Act, 1923.

APIRA, a cure for obstinate cases of rheumatism, is referred to in the advertisement of David Thomas & Co., 50 George Street, Baker Street, London, W.1. The article has been a family remedy for a hundred years and is now being offered to the general public.

C. & D. RETAIL PRICE LIST.—In the list of alterations in prices given in the *C. & D.*, February 9, p. 196, those for guaiacol should read: *Cost*—1s. 8d. oz. *Sell*—2s. 10d. oz., 7d. dr. Guaiacol carb. should be priced as follows: *Cost*—2s. 1d. oz. *Sell*—3s. 8d. oz., 9d. dr.

INSULIN.—Evans Sons Lescher & Webb, Ltd., manufacture insulin on a large scale and have ample supplies available. The insulin is sold at 12s. 6d. and 25s. per vial, the trade discount being 20 per cent. The company's advertisement in this issue refers to this successful manufacture.

WHITAKER & Co., dye specialists, Kendal, send us their new wall calendar (13 in. by 8½ in.), which combines a striking colour print with the element of advertisement in artistic fashion. We learn that Messrs. Whitaker's Press advertising has reached very large proportions.

PARFUMERIE NILDÉ WINDOW-DISPLAY PRIZES.—Under the scheme for 1923, the following prizes have been awarded:—*First prize*, £30: H. Rowe, 141 Exeter Street, Plymouth. *Second prize*, £20: Bennison's, Ltd., 86 Pimlico Road, London, S.W.1. *Third prize*, £10: F. W. Goodess, 25 Market Street, Leicester.

NEW NORWEGIAN COD-LIVER OIL.—Allen & Hanburys, Ltd., Bethnal Green, London, E.2, inform us that the first consignment of this season's cod-liver oil is on its way from their factory in Norway. Reports go to show that the fishing so far is small, although the livers are rich. Prices generally for the oil show an upward tendency.

WARNING.—With reference to advertisements by L. Franks, Cromwell House, High Holborn, London, W.C.1, appearing in our issues of January 26 and February 2, offering genuine Gillette razor blades for sale at prices stated, we regret to say that many complaints have reached us from subscribers who have answered these advertisements to the effect that the blades are quite unsuitable for sale by chemists at normal prices.

Index to Vol. XCIX.

THE issue for Volume XCIX, covering the second half of the year 1923, has now been sent to subscribers who have intimated their desire to receive it, or whose names are on the list which we keep of those who wish to have the indexes regularly as published. We shall be pleased to send a copy of the index to any subscriber who has not received one and who sends us a post-card request.

NEW PUBLIC MEDICAL SERVICE STARTED.—A scheme has been adopted by the medical men of Walthamstow, Leyton, Leytonstone and Clingford for the provision of a medical service for those who are not in a position to pay the usual fees or entitled to benefit under the Insurance Acts.

Trade-marks Applied for

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1924, p. 289.

(From "The Trade-marks Journal," February 6, 1924.)

Device of black circle bearing sketch of cat's face; for perfumery, etc. (48). By Wigglesworth, Ltd., Peel Mills, Church Street, Westhoughton, Lancs. 442,188.

"LAURENCE'S HAIR DYE"; for hair dye (48). By C. R. Harker, Stag & Morgan, Ltd., Devon Wharf, Emmott Street, Mile End, London, E.1. B442,825.

(From "The Trade-marks Journal," February 13, 1924.)

"NOBEL," on circular device; for chemicals (1), (2) and (3). By Nobel Industries, Ltd., 2A, Buckingham Gate, London, S.W.1. 443,442/443/444 (Associated).

"BEAUTOX"; for all goods (1). By A. E. Beattie, 147 Peter Street, St. Helens, Lancashire. 444,059.

"PINEX"; for chemicals (1). By Sissons Brothers & Co., Ltd., Bankside, Sculcoates, Hull. 444,266.

"OXYPIC"; for chemicals (1). By Harpie Manufacturing Co., Ltd., 2-14 Staple Street, London, S.E.1. 444,276.

"STERILITE"; for chemicals (2). By Wm. Butler & Co. (Bristol), Ltd., Silverthorne Lane, St. Philip's, Bristol. 442,794.

"LAVACLEAN"; for all goods (2) and (47). By Marshall Hardy, Ltd., Chariot House, Manningham Lane, Bradford. 443,035/036 (Associated).

"RHATOID"; for chemicals (2). By E. P. Mageo, Medical Hall, Farrell Street, Kells, co. Meath, Ireland. 443,791.

"ALBERT"; for chemical manures (2). By British Basic Slag (Alberts' Successors), Ltd., 15 Philpot Lane, London, E.C.3. 443,380.

"VIVOS"; for animal medicine (2). By J.E. Younger, 139 Dale Street, Glasgow. 443,436.

"LITPHEN"; for disinfectants (2). By Morris, Little & Son, Ltd., 42 Hallgate, Doncaster. 444,334.

"ACROSYL"; for all goods (3). By the Graesser-Monsanto Chemical Works, Ltd., Cefn, Ruabon. 437,105.

"KAOSAN"; for medicines (3). By Plovman & Feldenheimer, 19 Holborn Viaduct, London, E.C.1. 441,370.

"OLDYM"; for medicinal chemicals (3), goods (47), and for perfumery, etc. (48). By Röhm & Haas Aktiengesellschaft Weiterstädterstrasse 42, Darmstadt, Germany. 442,519/520/521 (Associated).

"APIRA" on label device, including bee; for rheumatism medicine (3). By D. Thomas & Co., 50 George Street, Baker Street, London, W.1. 443,393.

"GERMIDE" and "GERMOTAK"; for medicinal chemicals (3) and for perfumery, etc. (48). By Taylors' Drug Co., Ltd., 347 Burley Hill, Leeds. 443,344/345/346/347 (Associated).

"REGLYTE"; for scientific instruments, etc. (8). By Boots' Pure Drug Co., Ltd., 37 Station Street, Nottingham. 444,265 (Associated).

Information Department

INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated:

E/132. Amberzine (for chilblains)	H/52. Crex dispensing scales
H/22. Band-aid plaster bandages	W/52. Indiarubber teats, Two Horses Rampant brand
M/102. Coxeter's electro-magnetic machines	F/62. Linthorps, Ltd., for castor oil
D/102. "Deadwood Dick" rat-poison	T/92. Moulds for teats and soothers (glass or other material)
F/122. Elastic band truss, marked B31	H/112. "Oriloids" for coughs and colds
E/122. Importers of Danish Palm toilet soap	M/102. Samway's jappanned tin bandage boxes

INFORMATION SUPPLIED

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.4.

Crutchlow's Rubber Brushes. C/52	Rheumatin. B/42
Eversafe soothers. H/43	Russolax. B/23
"Mary Rose" Perfume. A/32	Simplex Soothers. G/12
Neo-Zirol. E/22	Suppository Tin Baths. P/43
	Winthrop's Luminol. B/22

Observations and Reflections

By Xrayer II.

The Death of Mr. Campkin

is a very serious loss to the Pharmaceutical Society, and will be deplored by many who do not as a rule take a very great interest in the Council's proceedings; for Mr. Campkin, to the weight and authority accruing to long experience and a singularly judicial mind, added a liberality and independence of spirit rare enough to be peculiarly valuable in men occupying his position. Only a strong man would have had the courage to act as he did in the historic crisis of a few years ago, and only one of known wisdom would have influenced opinion as his adhesion to the side of the numerically weaker party did. The effect of such action does not cease with the occasion that calls it forth; it may seem at the time to have failed of its effect, but it lives on in memory, an influence making for sanity and moderation in future controversies and times of difficulty. Perhaps no man in the Council had more of the confidence of pharmacists in general than Mr. Campkin.

The Registrar's Report for 1923

should tend to reassure those who are alarmed by the continual influx of new men into pharmacy. Though there was an increase in the number of new members of the Society over that of the year before, the number of new men on the Register was considerably less—at least in England. The number of new Major men was less in both countries, a fact the significance of which should not be lost on those who advocate the revision of the Major examination. As regards the numbers coming into pharmacy there is no need for alarm; what is disquieting is the number of those who keep outside and yet compete for the more remunerative half of our business. The position of the Benevolent Fund is far from being satisfactory, and the suggestions for improving it seem to me sadly inadequate. To try to meet a "definite and constant decline" by intermittent special efforts is absurd, and even constant efforts of the "special" kind are not enough. Dances, dinners, whist drives and such-like adventitious aids to charity are themselves a confession that charity alone will not keep up the revenue of the fund. There must, however, says Mr. Parry, be no appearance of compulsion. Under present conditions, perhaps not; there is compulsion enough already in subscriptions to the Society, to the R.P.U. and to local bodies. We are told that these subscriptions have nothing to do with the matter, but I beg to differ: they have a good deal to do with it, and, in its degree, so has the increase in the subscription to the Society. If that cannot be reduced (which I am far from affirming), why not ear-mark half the increase for the fund? If the consent of the Society were obtained, the amount so ear-marked would quite legitimately rank as a charitable contribution, and with the present membership it would yield nearly £3,000 a year. That the Society could not carry on quite well without this I cannot believe.

The Qualifying Examination,

if we may judge by the portion of the report dealing with this subject, is more stringent than ever, though the standard has not ostensibly been raised; and its division into two parts, which it was supposed would prove an advantage to candidates, appears to have told against them. This is the official view, the reason given being that there is now time to make the examination more thorough and searching. The inference we must draw is that it was not sufficiently searching before. There is no suggestion that the deficiency in general education which is alleged as a reason for so many failures is greater now than it was before the standard for the Preliminary was raised. The fact is that the standard for the Qualifying has been raised too. I should be more convinced of the necessity for this if there were a little less talk of "the safety of the public" in justification of it. So far as the examinations can ensure safety, the public were safe enough before, or if they were not the fault lay with

the Society. Such talk is nonsense, and there is not a little unconscious hypocrisy at the bottom of it. Another remark, in defence of the Council's treatment of the Preliminary, suggests, however, that nothing worse than a lack of clear thinking need be alleged in explanation of the talk in question. It is argued that the matriculation standard for this examination would have been best for everybody concerned, pupils included, yet the wisdom of the Council in accepting a lower one was, we are told, beyond question. It might have been so had the other course been manifestly not feasible, but this could hardly be maintained; there was a very strong body of opinion in favour of it.

There is an Attitude,

proper enough in itself and up to a certain point, which when even a little exaggerated becomes exceedingly annoying, and is perhaps the most fatal of any to all attempts to persuade or influence favourably. It may be expressed succinctly in the one word "bounce," which a young friend of mine well versed in slang and singularly well practised in its use declares to be the source of the still more offensive word "boulder." This is the attitude deprecated by a correspondent recently in commercial travellers. We all know the man who marches boldly into our shops as to the music of an invisible band playing "See the conquering hero comes," demands to see the buyer, informs us that we are bound to stock his goods, and even dictates the amount of our opening order. It is an attitude to which advertisers of "patents," too, seem increasingly prone. Not only do they try to force us into stocking their goods by flooding the newspapers with exaggerated statements of their value, but they bombard us with "literature" that is an insult alike to our intelligence and our position as pharmacists. A circular now lies before me that well illustrates the futility of this mode of propaganda. The article it "boosts" is advertised as "sold by all chemists," and the circular explains why along with chemists "stores and multiple shops" are mentioned. It is done "in self-defence" (a delicious touch, this!), because as a matter of fact the stuff is not stocked by all chemists. The proprietors do not seem to have asked themselves why. This note may perhaps help to enlighten them.

"Only a Londoner"

writes with refreshing vigour, and almost makes me ashamed of my own timidity. Where I did but "hint a fault and hesitate dislike" he lays about him with a sledge hammer and smashes the simulacra we both condemn right and left. But I doubt whether Mr. Ridyard will welcome his championship; certainly I should not were I in that gentleman's place. I prefer to think, damaging as the belief is to its sponsors' intelligence, that the list was seriously meant, and that Mr. Ridyard sincerely accepted it, but under the irritation of damaging competition fell from grace. An earlier effort in the way of united friendly pressure might have been equally successful, and in loyalty to the principle of the Union it certainly ought to have been tried before any individual action was taken.

Propaganda by Wireless

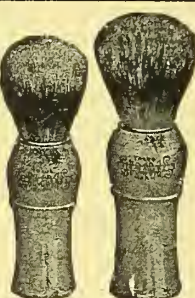
does not in the least appeal to me; I am inclined, indeed, to think it would do more harm than good. At all events, I hope that if attempted it will not be propaganda of an aggressive kind, that will reflect even by implication upon any other body, whether of unqualified "store-keepers" or professional men. Its source would be suspect, its motive so obvious as to defeat its object: it would probably be resented by most "listeners-in" as an illegitimate use of what is mainly a means of amusement; and it would almost certainly excite reprisals that might result in a most undignified squabble. However tactfully done, the proposed broadcasting of what, though ostensibly information, was in effect and intention propaganda, would have little or no permanent influence; it would be forgotten as soon as heard, like other items of news, or the musical and oratorical selections, "heard, not regarded," that make up the daily entertainment of the wireless audience.

SIMMS' set in Rubber Pure Badger Brushes



No.	Per doz.
275 ..	40/-
276 ..	52/-
277 ..	68/-
278 ..	100/-

Each in Box,
Guaranteed
against Anthrax
and all Defects,
Imperishable
Handles



ORDER TRIAL RANGE. Write for full list.

CALNAN'S, 30/32 Ludgate Hill, E.C.



**ROBINSON'S
of CHESTERFIELD**
for **CARDBOARD BOXES**
ROUND · OVAL · SQUARE · FOLDING

ROBINSON & SONS, LTD. • CHESTERFIELD & LONDON

AN announcement of particular
interest to you appears in this
issue on page 16.



**PURIFIES
THE AIR**

**Just the thing to
interest customers**

Air Purifier to hang in room or lavatory.
Continuous supply of gaseous air disinfectant.

Terms and particulars from—
BRITEX CHEMICAL CO. Ltd.
Audrey House, Ely Place - LONDON, E.C.1

**There will be a
big demand for:**

Atophan -

RHEUMATISM,
AFFECTIONS.

The original and sove-
reign remedy in GOUT,
and all URIC ACID

Veramon

Which produces
ANALGESIA WITH-
OUT HYPNOSIS.

Medinal -

The well known readily
soluble HYPNOTIC
and SEDATIVE.

Urotropine

The original URI-
NARY ANTISEPTIC

Our medical advertising campaign has commenced
and you will receive many prescriptions for these
specialities, which you may stock at once on

GUARANTEED SALE TERMS

Order at once from your Wholesale house.

Importers :

A. & M. ZIMMERMANN, LTD.
3 LLOYD'S AVENUE - - - LONDON, E.C.3



LUDDINGTON'S OILS

OLDEST AND BEST VETERINARY
NOW SELLING FOR LAMBING, &c.

Good Protected Profit.

Only Makers:

TOMLINSON & HAYWARD, LTD., LINCOLN.

**EXTRA
RECTIFIED**

ALCOHOL

FOR
PERFUMERY

J. BURROUCH, Ltd., E1 Cale Distillery, LAMBETH, S.E.11

Editorial Articles

Effect of Prohibition on Pharmacy

AMBROSE HUNSBERGER, Ph.M., in the "Annals of the American Academy of Political and Social Science" for September, inveighs against officialdom's interpretation of prohibition laws and regulations in the United States, and pleads for the right of pharmacy to live thereunder. A state of affairs is revealed which can only be described as tragic. Regulations made by state officials without technical knowledge of pharmaceutical trading have had the reverse effect to that intended. Personal interpretations of minor officials have resulted in legal chaos, while impossible demands for statistical "records" of alcohol used in pharmaceutical operations is converting many retail pharmacies and wholesale houses into stores for distributing alcoholic liquor. "Swashbuckling methods of enforcement by agents with dime novel sobriquets" and "inquisitorial methods" are terms in which inspectors are referred to and their methods designated. Section 1 of the Eighteenth Amendment to the U.S.A. Constitution prohibits the manufacture and sale of intoxicating liquor "for beverage purposes." The Enforcement Act which made pharmacists the legal distributors of liquor was opposed generally by pharmaceutical organisations, because it was feared that demoralisation of the practice of pharmacy might ensue. Even when the Act became law it was hoped to arrange for limitation of number of distributing points, but an "ambitious revenue official," in announcing (incorrectly) that a large majority of pharmacists had taken out "retail liquor dealers'" licences, stampeded the situation. The regulations under the above Act provide for two forms of permit for pharmacists: (1) An "H" permit to withdraw alcohol for use in compounding (which preparations when ready for sale must be sufficiently medicated to preclude use as beverages); (2) an "I" permit, which includes the same privilege and the right to sell alcoholic preparations (without the necessity of rendering them unfit for beverage purposes), on prescription of a physician and for medicinal purposes only. Officials in different States interpreted regulations variously, one State insisting that all retail pharmacists must take out "I" permits, thereby "creating, willy-nilly, a hundred per cent. quota of potential distributors of liquor in that State." In the same State over 600 new so-called drug stores opened during a period in which one-tenth of that number would represent the normal increase. The tendency of pseudo-pharmaceutical ventures to multiply was reflected in both retail and

wholesale businesses. In the hope of controlling liquor distribution by wholesalers, a ruling was made restricting sales to 10 per cent. of the total volume of business. This failed as a deterrent, and in a way became a boomerang in its effect on legitimate houses which have made their pharmaceutical reputation on a foundation of quality, prestige, and service. Many of the new enterprises violate all economic law and every rule of intelligent merchandising in efforts to secure general sales upon which to build a liquor business. The innocent suffer for the guilty, and 50,000 pharmacists are penalised with restrictive regulations for "the lower five" thousand that fall from grace. Thus it was charged that essence of Jamaica ginger was sold by unscrupulous dealers ostensibly for beverage purposes. Instead of applying the penalties of the Act to its sporadic violators a regulation was made declaring that the essence was fit "for beverage purposes," so that this household remedy is no longer available for domestic emergencies.

A network of regulations has arisen. These are as intricate and incomprehensible as they appear to be ineffective. Thus:—

A sixty-four page set of regulations supplemented by a flood of Treasury decisions, amended regulations, rulings, pro. mimeographs, pro. circulars, etc., followed in turn by an incessant stream of qualifying communications carrying revisions, interpretations, restrictions and cancellations of orders which were promulgated without being fully digested, all of them subject to varied, autocratic and sometimes vicious interpretations by the multitude of agents "clothed with brief authority" to enforce the Prohibition Act, has served to keep the pharmaceutical mind in a state of feverish activity, if not anxiety, for several years past.

Other added activities are involved in complying with sundry requirements, such as filing bonds guaranteeing the Government against loss of additional tax collectible upon any alcohol or liquor that might perchance be diverted to beverage use; submitting formulas of own-make preparations containing alcohol; applying for permits; applying for withdrawals, making affidavits; then more affidavits; segregating into designated classes the various preparations manufactured which contain alcohol; keeping detailed records of alcohol consumed in these operations and filing monthly reports of withdrawals and disposition of alcohol and liquors with inventory of stocks on hand.

Many pharmacists, to avoid attempts to keep impossible records, are buying products ready-made. Others, following line of least resistance, are confining their activities mainly to liquor sales, interspersing this with intensive merchandising on department store lines. Tabulating a report of liquor distribution in original bottles is simplicity itself compared with keeping a record of alcohol used in pharmaceutical preparations and prescriptions. It is noteworthy that the Commissioner of Inland Revenue has suggested setting up an Alcohol Advisory Committee, representative of various pharmaceutical interests, in order to mitigate the difficulties of the situation.

Insurance Dispensing Terms

XVII. Pharmaceutical Committee Expenses (*cont.*)

To the ordinary pharmacist in business pharmaceutical organisation is apt to be somewhat confusing. First of all there is the Pharmaceutical Society, with its local branches; then there is the Retail Pharmacists' Union, membership of which may be obtained by any proprietor pharmacist, whether he is a member of the Pharmaceutical Society or not, and without regard to whether he undertakes Insurance dispensing or not; and then in each area there is another body which claims the attention of the insurance chemist—the Pharmaceutical Committee. They are all independently constituted, and it is rather difficult for the chemist to preserve a clear idea of the relationship in which each stands to the others. The only statutory body with which Insurance chemists are

directly concerned—apart, of course, from Insurance Committees—is their own local Pharmaceutical Committee. The Pharmaceutical Committee only takes account of chemists actually engaged as principals in the work of Insurance dispensing. They must be employers, but they need not necessarily be members of either the Pharmaceutical Society or the Retail Pharmacists' Union. (The Pharmaceutical Committee also represents unqualified traders who, within the area, contract to supply appliances and drugs which are not poisons, but the number of such traders on the panel is very small.) The Pharmaceutical Society has nothing to do with trade matters now, and therefore we need not consider its position in connection with our inquiry, but it is necessary to examine in some detail the position of the Retail Pharmacists' Union in order to understand why Insurance chemists, through their Pharmaceutical Committees, make certain payments to the R.P.U. The Retail Pharmacists' Union provides various business services, but as each member pays the same subscription (unless higher benefits under the Chemists' Defence Association are desired), and as members may or may not be Insurance chemists, it is assumed that no services in connection with Insurance dispensing are offered by the R.P.U. in return for the ordinary subscription. If this assumption is not correct, the Insurance chemist pays twice for the same service—once through his membership subscription and once through his Pharmaceutical Committee. For the extra Insurance work that it does, the Retail Pharmacists' Union merely acts as the agent of Pharmaceutical Committees. The R.P.U. is not a statutory body. It has no place under the Insurance Acts. Its position as the national representative of Insurance chemists may be described as an hereditary one. In the beginning of the Insurance era, the Pharmaceutical Standing Committee acted on behalf of chemists and compiled the first drug tariff. Later, the Local Associations Executive succeeded to this position, and when the Pharmaceutical Society lost the test case, the R.P.U., which was established as a direct result of that case, inherited the office of acting as the central representative of Insurance chemists. When the Insurance scheme was first introduced, all negotiations in connection with chemists' terms of service were carried on locally, area by area, between chemists and Insurance Committees. At a later stage the Local Associations Executive was recognised as the national body representing chemists, and negotiations were conducted centrally for all areas. The Departmental Committee, in their report on the commercial tariff, recognised the Pharmaceutical Society as being competent to discuss with them, on behalf of Insurance chemists, methods of pricing prescriptions. And although there is no statutory requirement for any such national representative body being constituted, the Medical Benefit Regulations expressly accord recognition to such a body if it is constituted, for in the terms of service for chemists which are set out in the third Schedule of the Regulations, Clause 2 of Part I refers to alterations in the drug tariff being

approved by the Minister of Health after consultation with a body which is, in his opinion, representative of the general body of persons supplying drugs and appliances.

This position the Retail Pharmacists' Union holds. Pharmaceutical Committees acting on behalf of their constituents have certain statutory rights, one of them being to examine the prescriptions which have been priced by Insurance Committees (or their agents—the pricing offices), in order to satisfy themselves as to the correctness of the calculations. This right of access to his priced prescriptions the individual chemist possesses.

although it is generally waived in view of the action in this matter taken by the Pharmaceutical Committees. Part 2 of the third Schedule of the Medical Benefit Regulations provides as follows:—

(1) The Committee shall, if any person supplying drugs or appliances so requires, afford him reasonable facilities for examining all or any of the forms on which the drugs or appliances supplied by him were ordered, together with particulars of the amounts calculated to be payable in respect of such drugs and appliances, and if he takes objection thereto, the Committee will take such objection into consideration.

(2) The Committee shall, if so required by the Pharmaceutical Committee, afford that Committee similar facilities for examining such forms and particulars relating to all or any of the persons supplying drugs or appliances, and will take into consideration any objection made thereto by the Pharmaceutical Committee.

Each Pharmaceutical Committee, in the interests of all the chemists whom it represents, makes a systematic and regular check of the work carried out for Insurance Committees at the pricing office which deals with the prescriptions dispensed by chemists in the Committee's own area. This checking work could be done by each Pharmaceutical Committee independently, but practically all these Committees in the country appoint the same body as their agent in this matter, this body being the Retail Pharmacists' Union. Being an organisation possessed of the facilities for doing the work, it offers to undertake on behalf of Pharmaceutical Committees that part of the Insurance work which can be classed as national (or common to the whole country) as distinct from the work of a purely local character, which must be carried out by Pharmaceutical Committees themselves in their own areas. The R.P.U., therefore, is in this respect an agent appointed to carry out certain work at a contract price. One of the objects for which the R.P.U. was constituted is set out in No. 4 of its rules:—

To act as a representative organisation of pharmaceutical chemists and chemists and druggists in all matters coming under the National Health Insurance Acts or any statutory amendment, extension or re-enactment thereof, and in connection therewith to check prices, audit accounts, price prescriptions, conduct negotiations, collect information, give advice, enter into agreements with local committees for doing all or any of the above, and generally to do all things necessary to preserve and promote the interests of pharmaceutical chemists and chemists and druggists in connection therewith.

This, then is the work now carried out by the Retail Pharmacists' Union for most of the Pharmaceutical Committees in the country, and it is because these Committees pay the R.P.U. for that work out of the money deducted from chemists' accounts that this matter comes within our purview. We are examining this question, we need hardly say, without bias. We have arrived at this point during a careful examination of the factors which affect the payments made to chemists for Insurance work. We have shown that various tariff provisions press hardly upon the chemist and reduce his remuneration to a minimum, and now we find that, even when the amount due to him is calculated according to the tariff, there are these deductions made from his account for Pharmaceutical Committee work. If, therefore, Pharmaceutical Committees, while maintaining the efficiency of their work, can reduce their expenditure in any direction, they are adding directly to the chemist's profit. Ordinary business prudence would appear to suggest a more detailed examination of all these expenses, and this we propose to make in order to discover whether there are any directions in which economies can be effected.

The Rise in Linseed Oil

VERY irregular but generally strong conditions have again characterised the linseed-oil market since the close of the year. The London spot price towards the end of last week already crossed the £50 per ton mark, and the appreciation since the end of December last is over £8 per ton, an unusually big rise in so comparatively short a period, while quotations for deliveries within the current year have advanced more or less in sympathy, and vary down to about £38 for contracts covering the last four months of the year. It is curious that February delivery stands at a discount of about £3 per ton as against the spot value, but commands a premium of over £7 per ton compared with the terms paid lately for March-April delivery, in the neighbourhood of £40. This would indicate that the market is looking for a continuation of the prevailing scarcity of spot oil for another month or so, or until extraction at the mills becomes sufficiently increased from the more important quantities of seed which have arrived or are on the water. In view of the fact that crushers' operations for some few months past have been conducted on abnormally small stocks of linseed, the dearth of oil not only on this side but also at the chief Continental centres became inevitable and has had an important bearing on the speculative position. It may be recalled that in the latter part of last year, under the impulse of the bearish feeling aroused by the forecast of a huge River Plate crop (by far eclipsing all previous high records), dealers and speculators indulged freely in blank sales for May-August delivery at around £35, which position has since been lifted some £5 a ton. There is no doubt that an important "bear" position was then created in forward contracts, the levelling up of which presumably played a part in the recent continuous rise. Obviously the most has been made of the tightness in spot and near positions, and therefore present surface appearances might be regarded as being somewhat artificial. Yet the fact remains that there is a genuine scarcity of actual oil on the spot, which has become very severely felt by consumers, who will probably continue to experience some difficulty in securing supplies until something approaching normal conditions can be restored. The home demand for most seed oils has certainly been better for several weeks past, but there does not seem to be a great deal in the theory advanced in some quarters that trade requirements have so much increased as to precipitate the substantial advance. Recent strike troubles, although of rather short duration, and the fact that there is still some fear lest the hope of a settlement of the dock labour dispute should not be fulfilled, have proved a hindrance to definite indications of trade improvement. Home trade prospects at the same time are admittedly brighter than they were this time last year, and the home outlet for linseed oil is quite likely to experience an expansion towards the spring, provided its cost becomes less onerous. This, of course, depends largely on much freer shipments of seed on cheaper terms from the Argentine, which are confidently expected from now onwards. America, however, whose absorbing capacity has proved so great in the last year or two, must continue to be regarded as a potential although somewhat uncertain factor. At about this time last year, views, it will be remembered, were freely expressed as to a plethora of linseed, which certainly did not materialise because of the enormous American absorption from the River Plate, which, in fact, for 1923 were considerably in excess of a half a million tons, or about double those for the previous year. The large export surplus from the River Plate for the past

year, showing an increase of roughly a quarter of a million tons compared with 1922, was, indeed, so easily absorbed, in spite of the home takings from India having exceeded those from the Argentine, that it is now believed the latter country, for the present at any rate, is well able to retain her strong commanding position in the world's markets. The magnitude of the new Plate crop, on the other hand, is understood to be such, with an estimated exportable surplus of about 1,900,000 tons, that even on the assumption that the American takings this year are as heavy as they were for last year, it is suggested by some that River Plate resources alone should be sufficient to cope with the bulk of world requirements. There are, however, still not a few wondering whether the talked-of plethora of seed this season will materialise, although in addition to the huge Argentine shipments expected sooner or later, prospects as to the next Indian crop are reported to be entirely satisfactory and should result in shipments from that quarter panning out at least well in line with last year. Nevertheless, the possibility of a repetition of what happened in the first half of last year is perhaps not altogether remote. The combined grand total shipped in that period from the River Plate and India to all countries amounted to well over one million tons, against 606,900 tons in the first half of 1922, while 444,000 tons of the grand total given represented Argentine seed sent to the United States. The future cost of linseed and its oil-product undoubtedly hinges greatly on the American demand. Linseed is very dear, still commanding a large premium on the spot, Calcutta costing £23 and River Plate £21 to £21 10s. a ton, the latter comparing with £19 15s. a year ago, and £17 and £18 10s. respectively at the close of 1921 and 1920.

A New Cancer Cure

CARCINOLYSIN is the name given by Professor Dr. T. Matsushita to a principle, assumed to be a ferment, obtained from a Chinese plant known as "Haisung," a species of *Pinus*, which apparently displays an almost specific action on cancer. Carcinolysin is mixed with an oil extracted from "Poh," and in this form is injected subcutaneously in doses of 1 to 3 c.c., a course of treatment consisting in administering thirty injections. According to a preliminary communication in the "Deutsche medizinische Wochenschrift," January 4, this preparation is under investigation in Germany; Professor Matsushita states that it has been used by 1,368 Japanese doctors in 3,417 cases, with definite results in 64 per cent. of the patients. Carcinolysin possesses no bactericidal properties, but exerts a powerful action on carcinoma cells, destroying the nuclei; it is innocuous to normal individuals and animals.

The New Registers

THE Registers of Pharmaceutical Chemists and Chemists and Druggists for the current year are distinguished from their predecessors by slight changes that are of interest to those whose names appear in either Register. In the Register of Chemists and Druggists, the names of persons who were members of the Pharmaceutical Society on December 31, 1923, are marked with an asterisk. On turning to the Acts of Parliament printed at the beginning of the volume, we notice that an excerpt from the Dangerous Drugs and Poisons (Amendment) Act, 1923, has been added, together with the Arsenic Act, 1851, and two Sections of the Perjury Act, 1911. The realisation of these additions may account for the change from "post free" in one weekly announcement by the Society to "postage 9d." in the next. The table of contents leaves something to be desired in point of accuracy, as also does the list of honorary members, some of whom, apparently, retain their honorary membership though no

longer in this world. The London addresses, too, need uniform treatment. The clerical work connected with the Registers is, we understand, considerable; and for that reason the annual result could probably be made a more satisfactory one.

Bulgarian Otto's Annual "Crisis"

IT seems that the Bulgarian otto of rose industry is fated to meet crisis after crisis. Since the end of the war, the fickleness of the Bulgar peasant who has forsaken the beautiful rose for the more richly endowed Lady Nicotine has been declared with almost monotonous regularity. Last year, however, we were told that the rose bushes were affected with phylloxera—just the sort of disease that would affect neglected roses. As this failed to kill, the reports have gone back to the previous theme, the lure of *nicotiana tabacum*. According to a recent report ("The London Chamber of Commerce Journal"):

The 1923 production amounted to only 1,000 kilos as compared with 1,500 kilos in the previous year. This may be accounted for in part by the fact that the tobacco industry is proving considerably more profitable. The costs of production for one kilo have also increased to 30,000 levas, against 18,000 to 20,000 levas a year ago, and as the leva has depreciated in the meantime, it can readily be understood that the distillers are having difficulty in finding a market for their product in Great Britain, France and America. It is calculated that, if the present price of tobacco is maintained, the rose industry will vanish from Bulgaria within ten years, seeing that one decare of tobacco will yield a profit of between three and four thousand levas, whereas the same area under rose cultivation will not yield more than 1,200 levas, even if the price of the flowers remain at six or seven levas per kilo.

It is evident, therefore, that if the Bulgarians persist in the cultivation of roses they will ultimately harvest nothing but thorns.

Profit on Proprietaries

IN an article dealing with the demand insistently urged by Belgian pharmacists for a minimum profit of 30 per cent. on the sale of pharmaceutical specialties, Dr. M. Tramasure, one of the leaders of the Nationale Pharmaceutique ("Journal de Pharmacie de Belgique," January 27), points out that actually in most pharmacies the turnover in proprietaries equals the receipts from prescription work and counter sales. Indeed, pharmacies in which the sale of this class of goods represents 50 per cent. of the total turnover are becoming more and more rare, and in many businesses the receipts from the sale of specialties constitute as much as 60 and even 70 per cent. of the takings. Dr. Tramasure gives an interesting account showing the minimum expenses entailed in running a business with an annual turnover of 100,000 francs:

Rent	3,000 francs
Assistant's salary	9,600 "
Errand boy	2,400 "
Insurances	350 "
Taxes	2,000 "
Cost of upkeep	1,500 "
Telephone	500 "
Heating and lighting	1,000 "
Tips and presents	1,000 "
Unpaid bills	500 "
Tram fares, postage	500 "

These items represent a total expenditure of 23,350 francs. Assuming that 50 per cent. of the turnover, i.e. —the sale of specialties—yields a gross profit of 13,500 francs, and the remaining half, prescriptions, etc., a profit of 25,000 francs, on deducting the expenditure—23,350 francs—from the gross profits—38,500 francs—the owner is left a net income of only 15,150 francs. This, remarks Dr. Tramasure, is the return for a five years' course of study at a university, in addition to sinking at least 50,000 francs in the business. With this income of 15,000 francs the pharmacist is required to maintain a standard of life compatible with his social position, bring up a family, and keep himself abreast of scientific progress.

Ipomœa Seeds

Abstract of a portion of a thesis approved for the degree of Doctor of Philosophy in the University of London, entitled "The Histological and Chemical Examination of the Seeds of *Ipomœa hederacea*, Jacquin, and other Species of *Ipomœa*," by Herbert C. Kassner, B.Sc. Read, with illustrations, at a London evening meeting of the Pharmaceutical Society on February 12.

THE seeds of *Ipomœa hederacea*, Jacquin (N. O. Convolvulaceæ), were included in 1900 in the Indian and Colonial Addendum to the British Pharmacopœia and embodied in the Pharmacopœia of 1914. The addition of these seeds to the Pharmacopœia has resulted in the sale in London of the seeds of other species of *Ipomœa* and of other genera in the place of the official drug. The necessity for examining this drug thoroughly and for recording sufficient data to identify the official seeds, and also any commercial admixtures or substitutes, is emphasised by the purchases of the seeds of *Peganum Hormala*, L. (Rutaceæ), a dangerous substitute, and the seeds of *Ocimum Basilicum*, L. (Labiata), a useless substitute, together with purchases of spurious *Ipomœa* seeds. In response to a request from Professor Greenish, seeds of *Ipomœa hederacea*, Jacq., *I. muricata*, Jacq., *I. pes-tigridis*, L., *I. coccinea*, L., *I. pilosa*, Sw., and *I. eriocarpo*, R. Br., were specially collected for this research by the Forest Research Institute and College at Dehra Dun, U.P., India, in November and December 1921. The official description excludes only the much larger seeds of *Ipomœa*, such as *I. muricata*, Jacq., and those *Ipomœa* seeds which are not "nearly black." Kaladana is most commonly used and prescribed in the powdered condition, and since the seed is difficult to powder, especially in small quantities, this operation must be carried out almost entirely by the wholesaler. The question therefore arises—how is one to know whether a commercial consignment purporting to be the "Powdered Seeds of Kaladana" has really been prepared from the seeds of *I. hederacea*? It was found on separately reducing to a No. 60 powder the seeds of *I. hederacea*, *I. muricata*, *I. pes-tigridis*, *I. coccinea*, *I. pilosa*, and *I. eriocarpo*, and comparing them side by side that it was impossible to distinguish them from one another by the naked eye. A still more intricate problem is encountered in regard to the correct identification of the powdered seeds of *I. hederacea* as contained in *pulvis kaladana compositus*, B.P. In order to be quite certain that the seeds, which were specially collected for this investigation at Dehra Dun, India, in 1921, as well as those obtained from commercial sources, were the seeds of *I. hederacea*, Jacq., a number of plants were grown from these at the Royal Botanic Gardens, Kew, for purposes of identification and critical study. A number of plants were likewise grown from these seeds in the hothouses of the Chelsea Physic Gardens and at the Research Laboratories of the Pharmaceutical Society. The growth of the plants was carefully followed, and many important morphological differences were noted. The cotyledons and first leaves were especially studied and drawings made of them.

DETAILED EXAMINATION

The only detailed microscopical drawing of any seed of *Ipomœa* that could be found in the literature was that of a cross-section of the official seed by Planchon and Collin. Upon examination, this, as well as the description of the anatomical structure accompanying it, was found to be incorrect. This description has been copied by the authors of a number of standard books, apparently without verification. Flückiger and Hanbury, in their "Pharmacographia" (1874, 403), briefly describe the microscopic structure of the seeds, but do not furnish any illustration. Their description proved to be very inaccurate. As C. Van Wisselingh (Plaat II, 7) had made a small drawing of the microscopic cross-section of the seed-coat of *Ipomœa purpurea*, Roth, which appeared to differ in important details from that of the seeds of *Ipomœa* which I had examined, it was necessary to investigate this also. The authorities at the Royal Botanic Gardens, Kew, furnished me with some seeds

of *Ipomœa purpurea*, Roth, which were removed from the fruits of an herbarium specimen. Upon examination these seeds were found to resemble closely those of *I. hederacea* in the general type of cell and cell contents. C. Van Wisselingh's illustration entirely omits the hypodermis from the seed-coat and the characteristic large pits from the cells of the nutritive layer. In addition he has drawn these latter cells out of true proportion to those of the other tissues of the seed-coat. For a study of the tissues of the seeds under examination sections were made of material softened by hydrofluoric acid, but sections of seeds that had not been subjected to such treatment were used to determine the nature of the cell walls and of the cell contents. The treated seeds were supported in pith and cut with a hand microtome. The sections were mounted in a mixture of equal parts of aqueous chloral hydrate (5 in 2) and aqueous glycerin (1 in 1).

(Seven pages of the thesis are devoted to the details of this examination, some features of which are illustrated by diagrams.)

MICROSCOPIC EXAMINATION OF SURFACE PREPARATIONS

Complete comprehension of the morphology of the cells of these seeds necessitated the isolation and examination of each tissue in surface view. This required the adoption of methods which would easily separate the tissues but not the individual cells. Small surface sections of the seed-coat were accordingly placed in 10 c.c. of aqueous 2 per cent. sodium hydroxide, which was kept on a boiling water bath for twenty minutes; they were then washed free from adhering alkali with distilled water and transferred to a slide; on teasing out, the layers were easily separated, and the isolated tissues were mounted, in aqueous chloral hydrate and glycerin, for examination. The sodium hydroxide method was found to yield the tissues in the best condition for the study of the structure of the cells. In addition, the sodium hydroxide rendered all the tissues exterior to the embryo so transparent that in "focussing down" the cells of each successive layer could be readily distinguished. This serves as a check, since the cells of each tissue seen in surface section correspond in order with that of the cells seen in the transverse section. Caustic soda, as is well known, causes swelling of certain of the tissues, so that further preparations were made by the use of a mixture of chromic and sulphuric acids. The procedure was as follows:—Small surface sections of the seed-coat were placed in 10 c.c. of an aqueous solution containing chromic acid (10 per cent.) and sulphuric acid (10 per cent.) for about twenty to thirty minutes, after which they were washed by decantation with distilled water until all traces of acids were removed. They were then transferred to slides, after which the tissues were teased out and mounted for examination. The time that the sections are immersed in the acid bath is of importance, for it was found that only the cells of the seed-coat palisade were able to resist the destructive action of a prolonged contact with the acids. This method did not separate the tissues so readily as that previously detailed, but the undesirable swelling of certain of them was avoided. (Details and a diagram are given in the thesis.)

MICROSCOPIC EXAMINATION OF THE POWDERED SEEDS

As the result of numerous trials, it was found that the two most useful methods of treatment to exhibit the characteristics of the seeds in the powdered condition were the sodium hydroxide method and the chloral hydrate method, as detailed in paragraphs which follow. The first method is particularly useful to display the cell structure of the layers of the seed-coat, while the second method enables one to examine the more delicate tissues of the seed—viz., those of the endosperm and cotyledons.

Sodium Hydroxide Method.—The method is as follows:—0.1 gm. of the powdered seeds is placed in a 100 c.c. beaker with 25 c.c. of 2 per cent. aqueous solution of sodium hydroxide and heated on a boiling water bath for twenty minutes; this is then diluted with

75 c.c. of boiling water and filtered by means of a suction pump through a very fine-meshed cloth stretched over a porcelain funnel. The seed-tissues on the cloth are washed with 200 c.c. of boiling water to remove saponified oil and resin and gelatinised mucilage. After this the tissues of the seed are removed from the cloth and placed in a mixture of equal parts of glycerin, water, and alcohol, and are then mounted for examination.

Chloral Hydrate Method.—The method consists in placing 0.5 gm. of the powdered seeds in a centrifuge tube, adding 2 c.c. of an aqueous solution of chloral hydrate (5 gm.+2 c.c. water), and boiling for two minutes over a spirit lamp, then centrifuging and immediately decanting the supernatant liquid. A portion of the material left in the tube is then mounted in chloral hydrate for examination. In carrying out this method one cannot wash the residue with water, as it produces an opalescent preparation, and for this reason the mount should be made in chloral hydrate, and not in aqueous glycerin or in water.

Crude Fibre Methods.—In the course of ordinary routine analyses crude fibre methods are commonly used, and would probably be employed in examining powders of which *Kaladana* was a constituent. I therefore made such preparations, both by the "Dutch" or nitric acid method and also by the combined sulphuric acid and caustic alkali method; the details may be found in Wallis's "Analytical Microscopy."

(The next twenty-three pages of the thesis contain details concerning the examination of the seeds of *I. muricata*, *I. pes-tigridis*, *I. coccinea*, *I. pilosa*, and *I. eriocarpa*.)

BRIEF SUMMARY AND CONCLUSIONS

1. Seeds of several species of *Ipomœa* are collected in India and marketed there and in London as *Kaladana*. The seeds of *Ipomœa hederacea*, Jacq., *I. muricata*, Jacq., *I. pes-tigridis*, L., *I. coccinea*, L., *I. pilosa*, Sw., and *I. eriocarpa*, R. Br., were examined. All these seeds can be distinguished both by their microscopical and macroscopical features, of which a complete account, accompanied by original drawings at definite magnifications, is given in this thesis.

2. Briefly the seeds of *Ipomœa hederacea* may be distinguished macroscopically from the other *Ipomœa* seeds by their blackish colour, the presence of a minute protuberance at the distal end, a longitudinal dorsal groove, the presence of colourless, almost microscopic, trichomes sparsely scattered over the epidermis, and of dense minute dark brown hairs in the hilar depression. One hundred of them weigh between 3 and 4 gm. The pharmacognostic description in the British Pharmacopœia, 1914, is inadequate, and excludes only those *Ipomœa* seeds which are much larger than 5 mm. in length, and are not "nearly black."

3. Germination of the seeds of the above species shows that they can be readily distinguished, if necessary, by the character of their cotyledons and first leaves.

4. The most frequent substitute for, or admixture with, the Pharmacopœial seed is *I. muricata*, which is distinguished macroscopically by its smooth and completely glabrous exterior, including the hilar depression, its ruddy-brown to dark brown colour, and by 100 of them weighing between 14 and 18.5 gms. Khory and Katrak's statement that the seeds are "spiny" is an error.

5. Seeds of plants belonging to other families than the Convolvulacæ are occasionally substituted for, or found in admixture with, those of *I. hederacea*, but the official seed is easily distinguished macroscopically from all of these by its characteristic shape approximating to that of a sixth to a quarter segment of an oblate spheroid, and resembling a "quarter" of an orange. The arrangement of the parts of the embryo is characteristic, as also is the distribution of the resin-cells and the food reserves.

6. Microscopically the most diagnostic feature of all the above-mentioned *Ipomœa* seeds is the epidermis, and *Ipomœa hederacea* may be distinguished from all of the other seeds by the characteristic shape of the wavy walls

and the dimensions of the epidermal cells in surface section, and by the presence of sparsely scattered diagnostic trichomes of a restricted size.

7. The epidermis, with its trichomes, and the hypodermis are absent from the mature seeds of *I. muricata*. The palisade layer is the outermost protective layer of the mature seeds of this species, and is much wider in transverse section, and is composed of more rows of shorter cells than that of the Pharmacopœial seed. With the exception of the size of the cells, the remaining tissues of the seed are similar to those of the official species.

8. The characters of the powdered seeds are best shown by making preparations with 2 per cent. sodium hydroxide, and with boiling chloral hydrate solution, following the details given in the thesis. These methods are preferable to the "crude fibre" methods, since they are much less destructive to the tissues of the seeds, and best exhibit the tissues necessary for a diagnostic differentiation of the seeds of various species of *Ipomœa*.

9. As a result of the histological examination of the seeds of *I. hederacea*, Jacq., I found that the tissue which Flückiger and Hanbury designate as the "epidermis" is really the palisade, or third interior layer of the seed-coat, that their "blackish cuticle" is the true epidermis, and that the hypodermis and the mucilaginous layer have been entirely overlooked by them. The cells of the "nutritive" layer or parenchyma are likewise not "corky," and, furthermore, the cells of the cotyledon do not contain mucilage, as stated in their confused and very inaccurate verbal description, which is not accompanied by any illustration.

10. The very incomplete work of Planchon and Collin was also found to be incorrect in the most important details.

Westminster Wisdom

By the "C. & D." Parliamentary Representative.

PARLIAMENT MEETS

Parliament met on February 12 for the first time after the formation of the Labour Government. The Prime Minister (Mr. Ramsay MacDonald) explained the policy of the new Government.

SUPPLY OF CALF LYMPH

Mr. Mardy-Jones, on February 12, asked the Minister of Health whether he is aware that private medical practitioners experience difficulty in obtaining supplies of glycerinated calf lymph of the same guaranteed purity as that supplied to public vaccinators by the Ministry of Health; and, as many persons desirous of having vaccination or revaccination performed by their own medical advisers should have similar guarantees with regard to the purity of the lymph used to those extended to persons vaccinated by public vaccinators, will he take steps to secure the necessary powers to enable private medical practitioners to secure supplies of such lymph at a reasonable charge from Government sources?

Mr. Wheatley replied that, as regards the first part of the question, he is advised that there is no difficulty in obtaining from reputable firms supplies of glycerinated calf lymph of reliable quality. The action suggested in the second part would involve a large and costly extension of the present Government supply which he is not prepared to recommend.

Wills

MR. EDWARD BLADE, chemist and druggist, Lyndhurst, Lockwood Avenue, Poulton-le-Fylde, who died on November 27, left property of the gross value of £5,184 16s. 11d., with net personalty £2,324 8s. 6d.

MR. CHARLES MILES, chemist and druggist, Carmona, Roman Road, Radipole, Weymouth, who died on December 30, left estate of the gross value of £3,813 8s. 3d., of which £3,288 8s. 4d. is net personalty.

Associations' Winter Session

Edinburgh.—The Edinburgh Chemists', Assistants' and Apprentices' Association met at 36 York Place on February 6, Miss M. Grant Boag in the chair. Mr. Peter Boa, Ph.C., who gave a paper on *Glycerin of Cinchona*, B.P.C., said the method of preparation is open to criticism. It is directed to mix the tragacanth with the alcohol and distilled water and shake thoroughly. When 60 grains of powdered tragacanth is contained in 4½ fluid ounces of liquid it requires a person of considerable physical robustness to shake the mixture thoroughly. The gradual addition of the liquid extract of cinchona implies a continuance of shaking while there is still very little thinning of the liquid. The preparation can be made with economy of time and energy by the following method: To the tragacanth and alcohol, after they have been mixed, add at once about one-half of the other ingredients, previously mixed, and quickly shake well. Afterwards add the remainder and shake the whole till uniformly blended. Glycerin of cinchona is not in general use. It appears, however, occasionally in Continental prescriptions, consequently it is well to be able to effect its extemporaneous preparation expeditiously. In speaking on *Creosote Pills*, Mr. Boa said some pharmacists favour as an excipient powdered liquorice root and a little water. One has suggested incorporation of creosote with extract of liquorice and subsequent stiffening of the mass with powdered liquorice root. The B.P.C. formula contains animal soap and powdered liquorice root. All these processes yield fairly large-sized pills, the first being about 3 grains, the second 4 or 5 grains, and the third 4 grains. Creosote pills are fairly often prescribed. The following formula gives a satisfactory result to both compounder and patient:—

Creosote	...	...	...	m12
White beeswax	...	...	...	gr. 5
Anhydrous wool fat	...	...	...	gr. 1
Powdered liquorice root	...	...	...	gr. 10

Place the creosote, wax and wool fat in a short, wide tube and cork securely; heat on a water bath till the wax and wool fat are melted; agitate to mix uniformly and place in cold water till solidified; scrape out; place in a mortar with the liquorice powder; work gently into a mass and divide into six or 12 pills according to strength required. The mass is soft when newly prepared, but it sets on standing and the pills become firm and retain their shape. Powdered cassia is favoured by some for rolling the pills in. Mr. E. Knott, Ph.C., gave a paper on *Volatile Oils*. Mr. Knott gave a comprehensive and interesting account of the sources, methods of obtaining, chemical constitution, methods of determining chemical constituents, classification, and methods of detecting impurities of the various essential oils. The chairman moved a vote of thanks to Messrs. Boa and Knott.

London (W.).—A joint meeting of the Western Pharmacists' Association and the National Association of Women Pharmacists (London group) was held at Slater's Restaurant, Oxford Street, on February 13, the President (Mr. Harry Martin) in the chair. Dr. Leonard Williams, who was cordially received, delivered a lecture on

THE ENDOCRINE GLANDS

[Abstract]

Addison, in 1860, discovered the suprarenal gland, but failed to seize the idea of its secretory function. Sir William Gull and others gradually unravelled the mystery of the thyroid gland, thus opening up a new field, in which came the pituitary, pineal and thymus glands. The pancreas was shown to be provided, in addition to its external secretion, with an internal secretion passing directly into the blood-vessels. The endocrine glands constitute a hierarchy: the illness or absence of one reflects its influence on the whole system. If we take Shakespeare's seven ages of man as a division of human life, there is little difficulty in selecting the gland or glands responsible for each period. They defend the body against toxic invasion, and, in addition to protecting

us from hordes of germs, guard us from the more dangerous poisons that we ourselves produce. They are in the closest connection with the central nervous system, upon which we depend entirely for the intellectual life. Energy must be focussed on the nervous system: something is required to retard skeletal and visceral growth, as, otherwise, maturity is reached too quickly. In the first age of man, infancy, the thymus and pineal glands retard. Disease of the pineal gland may involve premature sexual development. The thymus gland is an enormous gland in infancy, reaching its minimum at the age of puberty, but never entirely disappearing. The thyroid gland comprises four smaller glands (parathyroid glands) with functions distinct from those of the thyroid proper. It is concerned in the utilisation of iodine and the metabolism of calcium salts. Calcium is the bread of our physiological life: rickets form the best example of improperly used calcium salts. In the second age of man, that of the schoolboy, the interstitial gland assumes the lead, and enters into diplomatic relations with those already established. The pituitary gland takes on great importance. Giants represent over-active pituitary: all true giants die of tuberculosis. There are minor degrees both of deficiency and excess: no man is entirely male, no woman entirely female. Shakespeare's lover need not detain us: his sighing and woful ballads denote the absence of gland qualities conspicuous in the soldier, in whom the glands have attained to a certain equilibrium. Fight, fright and flight are questions of endocrine pattern—i.e., of temperament. Shakespeare's remaining ages represent degenerate changes. The proportions in which hormones are mixed in the blood at birth may vary—e.g., in the case of four brothers, all of whom may be normal. Environment is of obvious influence. Education is a process partly of organised, but largely of fortuitous, suggestion. Psychologists often fail to realise that lack of adaptation to environment is chiefly of endocrine origin. Cooking is as great a departure from evolutionary normality as the distillation of alcoholic drinks. Vitamins, which may be described as exogenous hormones, are present, broadly speaking, in uncooked and absent from cooked foods.

DISCUSSION

The lecture, which was illustrated by lantern slides, was followed by a brief discussion, contributed to by Mr. B. R. Wilkinson, Mr. C. H. Hampshire, Mr. R. R. Bennett, Mr. A. R. Melhuish, Dr. Stanley White, Mr. Morley Taylor, Mr. E. White, Mr. J. T. Barrett, Mrs. Irvine, Mr. William Browne, Mr. J. P. Ellerington, Mrs. Freke, and Mr. Irwin (Ealing). The points raised had reference chiefly to the attitude to be adopted by the pharmacist in his capacity as guardian of the public safety. Mr. Hampshire suggested that pharmacists were in danger of having their ideas on glandular preparations formed by manufacturers' circulars, and inquired whether mixtures of dried glands were not in the nature of a blunderbuss. The dosage of thyroid was another question referred to; and all the speakers paid tribute to the lecturer's exposition of endocrinology. Dr. Leonard Williams, in replying to the discussion, remarked that the typical American of the illustrated papers has an over-active pituitary. The dose of thyroid is, or has been, frequently excessive, the fact being that people who require thyroid are often intolerant of it. By feeding the mother suitably, in a more advanced stage of knowledge of the endocrine glands, it may be possible to determine sex. Polyglandular treatment is a blunderbuss, but is better than no glandular treatment at all. By giving thyroid, for instance, other glands are stimulated. On the motion of the President, a very cordial vote of thanks was accorded to Dr. Leonard Williams.

BUON APPETITO!—Scene: Scottish tourist resort.

American (after making purchases): "Have you any gum?"

First-year Apprentice (producing a tube of Le Page's glue): "This is the strongest gum we keep."

American: "Good heavens! Is this the stuff you chew in Scotland?"

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the
National Health Insurance Acts,
Local Reports

ENGLAND AND WALES

Birmingham.—A mass meeting of nearly 150 pharmacists from Birmingham and surrounding districts was held on February 7 to consider the new contracts for Insurance dispensing. Mr. Leo Joseph, J.P. (chairman of the R.P.U.) presided, and Mr. J. E. French (chairman of the R.P.U. Insurance Committee) and Mr. G. A. Mallinson (secretary) were also present and addressed the meeting. The Chairman deprecated the action of a certain portion of the trade Press whose views had started at one end of the scale and suddenly leaped to the other end, and which had attacked the R.P.U. Executive for inactivity. The Executive was in the best position to judge, and would take immediate action when such action was indicated. Mr. French gave particulars of the work of his committee, and Mr. Mallinson summarised the progress of the negotiations on behalf of chemists. He emphasised the necessity for a high standard of service; the amount of payment was to a great extent in the chemists' own hands and dependent upon the "standard of service." In the negotiations which will soon have to take place with the Ministry for new contracts they hoped to be able to present a strong case for improved remuneration. Mr. H. H. Marshall and Mr. H. M. Traumer, representatives of the Group Area on the Central Executive, also addressed the meeting. A considerable number of questions were afterwards replied to by Mr. French and Mr. Mallinson, among these being the following:—The increasing tendency of prescribing larger mixtures than the customary sixteen dose—this, it was explained, should be dealt with by Pharmaceutical Committees, to whom such should be referred, as a tendency towards extravagant prescribing. The prescribing of large quantities of dressings and inadequacy of the fee in such cases—this might be a case of excessive prescribing. Proprietaries, stamped or unstamped—if dispensed unmixed with other ingredients the stamped package should be supplied and noted at back of prescription. Rural areas and doctors' dispensing.—Mr. Mallinson explained the advantages obtained in chemists' interests in these areas. Late surgery hours—particulars should be communicated to the Pharmaceutical Committee; indication was given of the course to be adopted in dealing with these complaints. Mr. H. Rigg, Chairman of the Birmingham branch, thanked the representatives of the Executive, and proposed a resolution (which was passed) affirming the confidence of the meeting that the interests of chemists in Insurance matters were well looked after by the Executive.

Middlesex.—The annual meeting of the Insurance Committee was held on February 4, at which the Finance and General Purposes Subcommittee reported the payment of accounts totalling £58,061 17s. 8d. Amongst the accounts were the following:—To chemists—October accounts, £4,080 10s. 9d.; to practitioners for drugs, £249 15s. 11d.; ditto for dispensing to patients, £223 4s. 6d.; ditto for emergency drugs, £8 16s. 10d.; to Pharmaceutical Committee, balance of administrative expenses, £60 11s.; to chemists, November accounts, £4,345 1s. 6d.; to practitioners for emergency drugs, £4 11s. 8d.; to Pharmaceutical Committee on account of administrative expenses, 1924, £250. It was reported that there were 307 chemists on the panel. There has been one resignation and five admissions to the panel since November. The following were elected members of the subjoined committees:—Hours of Service of Chemists, Messrs. C. W. Andrew, H. E. Clement and H. Wolfe; Pharmaceutical Service Subcommittee, Messrs. G. Saunders, H. E. Clement and Miss Double; Dispensing Subcommittee, Messrs. G. O. Saunders and Mrs. Sebright; Joint Pricing Committee, Messrs. Wolfe and Eaton.

Nottinghamshire.—At a meeting of the Insurance Committee the Pharmaceutical Service Committee reported that twenty prescriptions had been analysed, and the result was very satisfactory. Mr. Gibson thought that gratification should be publicly expressed at the result of these drug tests.

Surrey.—At a meeting of the Insurance Committee held on February 6, the Testing of Drugs Subcommittee reported that 12 shops had been selected for presenting test prescriptions. Mr. E. T. Neathercoat and the clerk were appointed to negotiate with an analyst to examine the medicines. One name was added to the list of chemists, and there was one withdrawal.

Metropolitan Panel Chemists

A REPRESENTATIVE gathering of Metropolitan panel chemists was held on February 7 at the Kingsway Hall, London, W.C. Mr. Leo Joseph, J.P., was in the chair, and was supported by Messrs. A. R. Melhuish, J. E. French, A. R. Keith, J. Keall, and J. Milner. Mr. G. A. Mallinson and Mr. G. A. Tocher were also present.

Mr. Leo Joseph, in opening the meeting, said that the policy of the Executive of the Retail Pharmacists' Union is to secure for panel chemists a fair and adequate remuneration for their work. The Executive does not consider that the present remuneration is at all adequate. Mr. J. E. French said that the time is ripe for a revision of the terms for Insurance dispensing. There is an increasing demand for expensive preparations which carry a totally inadequate dispensing fee. Chemists had good ground for going to the Ministry of Health for better terms.

Mr. G. A. Mallinson then reviewed the position from 1916 to the present, pointing out the various changes which have taken place. He referred to the good work done by the respective Pharmaceutical Committees in the Metropolitan Group in promoting and maintaining a satisfactory dispensing service. He urged all chemists to continue to give a proper and courteous service to the insured population. The R.P.U. has already taken up the matter of the dispensing fee for Insulin. Messrs. Melhuish, Keith, Keall and Milner briefly addressed the meeting, the main topic being the maintenance of a good pharmaceutical service on a more satisfactory scale of fees. An interesting discussion then took place. Several chemists in no uncertain way expressed their opinion regarding the unsatisfactory rate of remuneration and the absurdity of supplying material in many cases at a loss. The speakers emphasised the ridiculous position they were in regarding the supply of Insulin; not only did they sustain loss in handling this preparation, but the high actual cost was not recovered for about two months. Mr. J. Wellesley Douglas considered that a good and polite service should be given, but the responsibilities of the dispensing chemist are not properly recognised by the present inadequate fees. Mr. C. Norman Fox pointed out that each day chemists' establishments are available for twelve hours and over, and that it is a great strain upon the staff during the last two hours of the day, when the volume of dispensing is greatest. The present scale of fees does not allow for the employment of extra labour for the purpose of relieving this pressure of work. A more satisfactory and equitable condition could be produced if doctors commenced seeing their patients earlier in the evening. Mr. C. A. Noble (chairman of the London Pharmaceutical Committee) stated that his committee had gone into the matter of the supply of expensive preparations and Insulin. The committee suggested that an increased fee should be paid for such preparations and that a dispensing fee of 2s. 6d. per prescription should be allowed for the supply of any quantity of Insulin. Mr. J. A. Thompson, referring to the Regulations made under the Dangerous Drugs Acts and the general responsibilities of the chemist, considered that the chemist was entitled to a higher scale of fees than those of the present scale, and that the R.P.U. should press the matter with the Ministry of Health. Among those who also took part in the discussion were Messrs. Hearle, Barrett, Jennings, Jordan, Mayes, Greatrex and Trick. The various questions raised were answered by Mr. Mallinson.

At the conclusion of the meeting the following resolution was proposed by Mr. Barnard, seconded by Mr. Noble, and carried unanimously:—

That this meeting, having made known its views, expresses its confidence in, and agrees to support, the Executive of the R.P.U. in their negotiations with the Ministry of Health.

Pharmacy in the New Turkey

UNDER the former *régime* all matters pertaining to public health were concentrated in the hands of the Minister of the Interior. In the new Turkish republic a special department has been created, the Commissariat of Health and Public Assistance (*sihîe ve muavvenet-i idjtimaye Vekâletî*), in charge of one of the members of the Council of Commissaries of the People; this department includes a section to deal with the care of the refugees, the Civil Medical Council, the corps of inspectors of pharmacies and drug-stores, and a bureau entrusted with the supervision and creation of dispensaries. In the single vilayets into which the Turkish republic is divided questions dealing with the public health of the population are placed under local sanitary authorities having their seat in the capital of the vilayet. These local sanitary bodies, among other functions, are entrusted with the supervision of all pharmacies and drug-stores within the vilayet, and have the right to open public dispensaries in districts where these are required owing to the outbreak of an epidemic, or to combat any endemic diseases. Pharmacies in Turkey are divided into three categories: (1) commercial pharmacies; (2) municipal pharmacies; and (3) hospital pharmacies, and pharmacies attached to charitable institutions. The term "commercial pharmacies" is applied to businesses run by private enterprise, i.e., the pharmacies open to the general public. To obtain permission to open a new pharmacy, or to take over an existing business, an application must be made to the health authority at the capital of the vilayet, and this application must be accompanied by the diploma granted by the Turkish School of Pharmacy. Holders of foreign pharmaceutical diplomas may receive permission to own a pharmacy in Turkey on passing a special examination before a commission of Turkish professors. This application, together with the diploma, are transmitted by the local health authorities to the Commissariat of Health and Public Assistance in Angora, with which the final decision rests. In the case of opening a new pharmacy, the authorisation to commence business is granted only following a visit to the premises by an inspector of pharmacies, whose duty it is to ascertain whether it is adequately fitted up and equipped with at least those medicaments enumerated in the list published by the Board of Health, and which are required to be kept in every pharmacy. It may be mentioned that the Turkish law prohibits any agreement between a qualified pharmacist and a non-qualified capitalist for the purpose of running a pharmacy; however, in view of the practical impossibility of proving the existence of an agreement of this kind, many young qualified Turkish pharmacists unprovided with the necessary funds find means of establishing themselves in business with the financial aid of their friends. The local authorities in the provinces are empowered to provide municipal pharmacies, which must be managed by a qualified pharmacist, who is responsible to the authorities for the conduct of the business; the Turkish law specifically forbids the manager of a municipal pharmacy from running at the same time a business on his own account. The municipal pharmacies are required to supply free of charge medicines to certified paupers; at the same time they are authorised to make up prescriptions and to sell medicines to the public against payment. The pharmacies attached to hospitals or charitable institutions have also to be managed by a qualified pharmacist, who assumes full responsibility for all the medicaments supplied by him on behalf of the patients receiving treatment in these institutions. The managers of these pharmacies are paid a fixed monthly salary, and unlike the managers of municipal pharmacies, who are *de facto* lessees of those businesses, they receive no remuneration from their clients. Pending the publication of a Turkish pharmacopœia, the French Codex is the standard officially recognised by the Turkish authorities; however, the British, German and United States pharmacopœias are also recognised, and it is important to note that the requirements laid down in these works are accepted by the customs authorities on importing pharmaceutical products into Turkey.

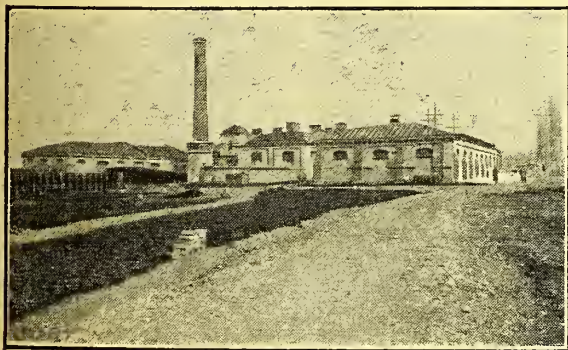
Spanish Aspirations

THE utter disregard shown for their grievances by the Government has long been a sore point with Spanish pharmacists, and the change of *régime* afforded a suitable opportunity to voice their complaints and desires. In a memorandum submitted to the president of the Military Directorate, the National Pharmaceutical Union exposes the aspirations of the profession. In the first place, the demand is put forward that the laws regulating the exercise of the pharmaceutical profession should be rigidly enforced. Legally the manufacture and distribution of medicines are restricted to pharmacists, but in defiance of the law medical men are preparing specialities: "This is an injustice, since physicians are incompetent to prepare medicines, not having received the necessary instruction in this art, which requires special technical and scientific knowledge, as well as a professional conscience." Another grievance is the preference shown to the medical profession in connection with appointments under the public health laws. "The physician by no means possesses an encyclopædic knowledge, and certainly the pharmacist is more competent to deal with the analysis of foodstuffs, etc." The inspection of pharmacies, drug-houses, and laboratories in which specialities are prepared is entrusted to the pharmaceutical sub-delegates, but as these perform their duties without remuneration, and have to attend to their own business, it follows that their duties are performed perfunctorily, particularly since their appointment is largely due to political influence. Consequently, it is suggested that the selection of suitable officials should be entrusted to the Colleges of Pharmacists, or rather that an independent corps of 49 provincial inspectors under an inspector-general of pharmacies should be created, to perform their duties as far as possible independently of the medical inspectors. Particular interest attaches to the demand for a reform of the professional curriculum. The future pharmacist should be required to possess an adequate knowledge of mathematics and natural science, also of the French language, and of one other language, either English or German. After spending two years in a pharmacy, and three months in a pharmacy attached to a hospital, a course of five years' study at a university is postulated before passing the examination for the diploma. Among the subjects for study figure: General biology; bacteriology; the preparation of organotherapeutic products, serums and vaccines (six months); toxicology; public hygiene and disinfection; pharmacodynamics; pharmaceutical industries (8 months); accountancy (3 months); first aid to the wounded (3 months); biological chemistry and analysis (11 months). With regard to the almost farcical course adopted by the Government in delaying the enforcement of the law of 1919, to regulate the manufacture, importation and sale of pharmaceutical specialities, ultimately abrogating this law in view of the elaboration of an entirely new measure, promised for January 1, 1924, the National Pharmaceutical Union demands that the proposed new law should embody the principle that only Spanish pharmacists shall be permitted to manufacture and sell pharmaceutical specialities, whether of Spanish or foreign origin. In order to guarantee the correct composition of this class of preparations, a special laboratory should be created to control all new preparations and synthetic chemical products placed on the market for therapeutic use. The present system of the free exercise of pharmacy, "as if it were a mercantile undertaking," has led to so much competition as to seriously imperil the status of the calling and the public health, since "less scrupulous and morally weak members of the profession are tempted to resort to adulterations and substitutions in order to increase their profits." As a remedy, it is urged that a limitation of the number of pharmacies is imperative in the public interest. In this connection it is pointed out that the limitation of businesses is at present under consideration in Spain for a number of trades, for instance, bakers. Further, the demand is made that the profession should have the right to institute its own courts, empowered to deal with offences against the ethics and dignity of pharmacy, that is to say, with

transgressions that do not come within the province of the law, but which prejudice gravely the pharmaceutical service and its standing in the eyes of the public; it may be mentioned that the medical profession in Spain already possesses jurisdiction of this kind over its members. Finally, attention is drawn to the necessity of creating a national chemical industry and of utilising the naturally occurring medicinal plants; towards the realisation of both aims the 6,000 pharmacists of Spain would be in a position to render valuable assistance, to the benefit of the country and its scientific advancement. The memorandum closes with the following moving appeal:—"If the Directorate which now rules the destinies of Spain considers that the social functions of pharmacy, its noble ambition to collaborate in promoting the public welfare and increasing the prosperity of the country, are deserving of recognition, let them grant to pharmacy the full exercise of its legitimate rights; if, on the contrary, they are of opinion that the functions of pharmacy are insignificant, and its labours unworthy of appreciation, may they put a swift end to the slow decay which has invaded pharmacy, ordering the closure of the schools, in which youth dreams of conquering rights and honours which later are treated with contempt by the whole world."

The Santonin Industry

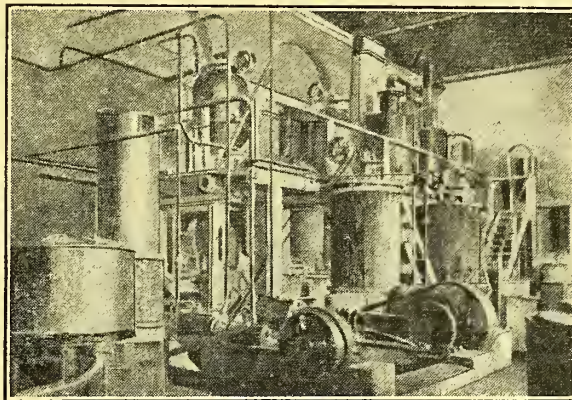
DURING the past two decades there have been numerous references in *THE CHEMIST AND DRUGGIST* to the santonin industry in Turkestan, but this is the first occasion on which we have been in a position to publish a photograph of the only factory now in existence. This factory is located at Tshimkent, a small district town in Syr Darya, Russian Turkestan, and lies at an altitude of 1,650 ft. on the road from Tashkent to the Kuldsha. It is situated about seventy miles to the north-east of Tashkent and forty miles from Kabul Sai on the Orenburg-Tashkent railway, which is the nearest station. The factory is 1,230 miles from Krasnovodsk on the Caspian Sea, and 2,148 miles from Moscow—a three to four days' railway journey. During the war many of the adjoining buildings were destroyed, but the accompanying photographs show that the factory has now been completely rebuilt. We understand, however, from the Eastern and Russian Trading Company that the factory has been in full working order for some time past, and many of the former staff of chemists and workmen have returned to their employment and are now engaged in



EXTERIOR OF FACTORY.

producing precisely the same quality of santonin as prior to the war. The output, it need hardly be said, is strictly controlled under the direction of the Trade Department of the Russian Government. At the close of the day's work seals, which are only broken in the presence of officials, are fixed to the doors, and the buildings are patrolled by armed guards. This precaution is due to the state of the country and to prevent smuggling. The finished product is sent to Moscow by rail and thence to Petrograd, reaching London by steamer direct from that

port. The dark-coloured mass lying in front of the factory is pressed wormseed-cake in cubes, deprived of its oil and santonin. This makes an excellent fuel upon which alone the factory depends. It is common knowledge that the industry in Turkestan has met with many vicissitudes, and little is known about it prior to 1880, when Turkestan came under the Russian Government. It was then that unsuccessful attempts were made to concentrate the manufacture of santonin in all its stages



INTERIOR OF FACTORY.

there. It was in 1882 that the late Mr. Ivanoff (the death of whose son was reported in the *C. & D.*, January 26, p. 123), together with Mr. Sawinkoff, erected a factory at Tshimkent. This enterprise was successful for several years, but in 1889 the factory had to be closed. About this period there seems to have been considerable competition with Germany, and Hamburg firms were regarded as responsible for bringing down prices in order to strangle the Russian factory. To ensure their ends the Germans also erected two factories in the neighbourhood of Tshimkent for the production of crude santonin. The critical period in the industry appears to have lasted from 1889 to 1894, as in 1895 the factory was again re-opened and continued in operation until the war broke out. At various periods five-year monopolies have been granted by the Russian Government to collect wormseed, and for many years the distribution of santonin was monopolised by Germany. All this is now altered, and the industry is concentrated in one factory under a special Government Committee, London being the centre of distribution for the finished product. Wormseed is being shipped regularly to London in conjunction with santonin, and such seed is guaranteed to contain not less than 2 per cent. of santonin, while it frequently runs over 2½ and 3 per cent. There is little possibility of any extension in the collection of the genuine *Artemisia cina*, as it is only found in a very restricted area in Turkestan. Many attempts have been made to cultivate it elsewhere in Turkestan, but they have not been successful, as although the cultivated wormseed is identical in appearance with the genuine, yet it yields no santonin. Since the sole distribution to the world has been entrusted to the original agents, the Eastern & Russian Trading Co., and the price fixed at about £65 per kilo., there has been an enormous demand for the product. Sales, we understand, have been larger than ever before. This is due primarily to the recognition of santonin by eminent authorities throughout the world as the classic anthelmentic, 100 per cent. effective against intestinal worms; secondly, to the uniformity and stability of the prices in all markets, with a guarantee against reduction; thirdly, the fair margin of profits derived from this business by traders and manufacturers alike.

THE Bradford Branch of the Pharmaceutical Society has given four prizes of 10s. 6d. each to be competed for by pharmaceutical students at the Bradford Technical College.

Trade Report

42 Cannon Street, E.C.4, February 14.

THE question as to whether there will be a transport strike or not is the uppermost topic in the produce markets at the moment, and this naturally has an unsettling effect on business generally. Judging by the Board of Trade returns, little fault can be found with the January figures of British exports of chemicals, drugs and the like, which at £2,413,130 (f.o.b.) are £166,297 more than in January last year, while imports at £1,118,917 (c.i.f.) are £67,896 less than in January, 1923. The drug and medicine exports were valued at £259,000 or £6,000 more. In the drug market, cascara sagrada has shown more activity on spot at advancing prices, and holders of the limited stocks are very firm. The Lofoten cod-fishing made little progress last week, and the market has a rising tendency. Menthol is easier again, but towards the close more inquiry was evinced: after a quiet week Japanese oil of mint also showed more activity on Wednesday, both on spot and forward. Japanese refined camphor continues easy in the absence of support and accumulating stocks. Honey is very firm and common Jamaica has advanced. Lime juice is 1d. to 3d. per gallon higher owing to U.S. buying in the West Indies. Gingers (particularly East Indian and Jamaica) are dearer. East African beeswax is scarce and higher. Agar agar, after an easier period, has shown signs of recovery. Albumen is likely to be dearer before the new crop arrives. Pharmaceutical chemicals are unsteady and weak on account of the 26 per cent. reparation question. Aspirin has weakened of late, while salicylic acid, sodium salicylate and methyl salicylate have also eased; both phenacetin and phenazone have moved in buyers' favour; benzoate of soda is tending easier. Citric acid is rather dearer at the source, but the demand has not improved; tartaric acid is steady. Chrysarobin is dearer. Industrial chemicals show few changes, there being a distinct lack of buyers. Potassium prussiate is cheaper. British zinc oxides have been advanced, and some of the lead products are again firmer, including red lead and litharge.

Higher	Firmer	Easier	Lower
Arrowroot	Bois de rose (femelle) oil	Agar agar	Acid oils
Cascara sagrada	Geranium oil	Camphor (Jp., ref. slabs)	Creosote oil
Chrysarobin	(Bourb.) c.i.f.	Menthol	Hydroquinone
Citric acid	Honey	Methyl salicylate	Potash
Ginger	Lime oil (W.I.)	Phenacetin	prussiate
Limejuice	Litharge	Phenazone	Pyridin
Rape oil	Mint oil (Jp.)	Salicylic acid	
Spike oil (Sp.)	Petitgrain oil (Para.)		
Sugar	Red lead		
Wax, bees (East African)	Soya oil		
Zinc oxides			

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday:—

Place	Method of Quoting	Par of Exchange	February 6	February 13
Amsterdam	Fl. to £	12.107	11.48½—11.49½	11.49½—11.50½
Berlin	M to £	20.43	17-19 billions*	18½-19½ billions*
Brussels	Fr. to £	25.22½	105.10—105.20	112—115
Calcutta	Per rup.	24d.	16½d.—16¾d.	17d.—17½d.
Christiania	Kr. to £	18.159	32.05—32.10	32.15—32.20
Courtnaple	Pst. to £	110	800—820	810—820
Greece	Dr. to £	25.22½	242—248	252—255
Italy	Lire to £	25.22½	98½—98½	98½—98½
Kobe	Per yen	24.58d.	25½d.—25¾d.	25½d.—25¾d.
Lisbon	Escu.	53½d.	1½d.—1½d.	1½d.—1½d.
Madrid	Pts. to £	25.22½	33.70—33.73	33.73—33.75
Montreal	\$ to £	4.86½	4.44—4.44½	4.43½—4.43½
New York	\$ to £	4.86½	4.31½—4.31½	4.30½—4.30½
Paris	Fr. to £	25.22½	92.85—92.90	95.90—96.00
Singapore	Per dol.	—	28½d.—28½d.	28½d.—28½d.
Switzerland	Fr. to £	25.22½	24.76—24.78	24.74—24.76
Vienna	Kr. to £	24.02	303,000—308,000	303,000—308,000

* Nominal.

Cablegrams

NEW YORK, February 14.—Business is fair. Jalap has advanced to 38c. per lb., and belladonna leaves to 26c.; belladonna root is also higher at 12c. Mandrake root has declined to 18½c., and balsam tolu to \$2.00 per lb. Buchu is cheaper at 79c. Resublimed iodine is lower at \$4.40 and potassium iodide at \$3.60. Calomel has declined to \$1.10 and corrosive sublimate to 87c. per lb.

BERGEN, February 13.—The total catch of cod for the whole of Norway since the opening of the season amounts to 1,300,000, against 2,300,000 for the corresponding week of last year, and the yield of steam-refined medicinal oil is 2,430 hectolitres, against 4,163 hectolitres last year. Market for 1923 medicinal oil is firm and dearer at about 107s. per barrel c.i.f. London.

Revue des Marchés

Sommaire des principaux mouvements des prix des drogues, essences, produits chimiques et pharmaceutiques sur le marché de Londres.

Abréviations d'usage employées pour indiquer les mesures de poids et de capacité:—Ton = 1016 kg.; Cwt.=50,8 kg.; lb.=453 gr.; oz.=28,34 gr.; Gal.=4546 c.c.

POUR le moment on signale peu d'affaires sur le marché des drogues et des produits chimiques. Par contre en épices la demande en consommation s'est accentuée et les ventes se développent d'une manière satisfaisante. En drogues, on annonce une intensification de la demande pour le cascara sagrada dont le prix est en hausse. Le menthol est en tendance faible, surtout puisque les derniers arrivages n'ont pas trouvé d'acheteurs. En produits chimiques industriels, peu de changements en raison de la faiblesse de la demande. Les produits pharmaceutiques sont dans une situation de transition en attendant le résultat des négociations regardant la perception du droit de 20 p. 100 pour compte des réparations dont sont frappées les importations allemandes. L'orientation qui prédomine est vers la baisse, notamment pour l'acide acétylsalicylique, l'acide salicylique, les salicylates, l'acide benzoïque, les benzoates, la phénacétine, et l'antipyrine.

Zum Marktbericht

Überblick über die wichtigsten Preisveränderungen auf dem Londoner Drogen- und Chemikalienmarkt.

Abkürzungen:—Ton=1016 kg; Cwt.=50,8 kg; lb.=453 g; oz.=28,34 g; Gal.=4546 ccm.

DER Drogen- und Chemikalienmarkt lag ruhig, dagegen zeigte sich gute Kauflust für Gewürze bei andauernd steigenden Umsätzen. Bei anziehenden Preisen wurde Cascara Sagrada lebhaft gehandelt, während die Preise für Menthol (die letzten Abladungen sind unverkauft geblieben), Kampfer und Agar-Agar nachgaben. Der Schwerchemikalienmarkt war durchaus untätig, besonders weil die Käufer sich andauernd zurückhielten. In pharmazeutischen Chemikalien hatte die Tendenz einen matten Unterton, denn die Ungewissheit über den Ausgang der schwebenden Verhandlungen über die Erhebung der 26 v.H. Reparationsabgabe drückt auf den Markt, und für eine Reihe von Produkten sind die Preise zurückgegangen, und zwar für Acetylsalicylsäure, Salicylsäure, Salicylate, Benzoesäure, Benzoate, Phenacetin und Antipyrin.

Crude Drugs, etc.

ALBUMEN.—Stocks of Chinese egg are very small and there is very little likelihood of the present supplies meeting the demand before the new season's arrivals, which are not expected before July. Taking this into consideration there is every prospect of dearer values during the next few months. Last year the price of No. 1 prime at the commencement of the season was 2s. 7½d., whereas the price of the current new season's comes at 4s. 3d. c.i.f. for May-June shipment, a difference in value of 1s. 7½d. per lb. Buyers, however, have exhibited caution in securing supplies, and in consequence of this "hand-to-mouth" policy prices have not appreciably risen since the beginning of the year. On the other hand, the limited home stocks, combined with the fact that consumers will shortly have to come into the market fairly heavily, denotes that higher prices may be expected. During the next four months there will, no doubt, be fair competition for the limited supplies available, especially if the Continent again starts buying.

Consumers would, therefore, be well advised to cover a good portion of their requirements at the present time rather than take the risk of paying higher prices later on. The demand for albumen has increased owing to the very poor quality of the shipment made from China of the liquid yolk. Appalling losses have been made by importers on this side in consequence of parcels being rejected and left on their hands. No. 1 prime albumen is steady at 4s. 11d. to 5s. per lb. on the spot.

ALOES.—The "Plassy" from Bombay has brought 34 kegs.

ANNATTO SEED.—A good c.i.f. business continues, comprising February-March and February-April shipments of Jamaica description up to 1s. 4½d. to 1s. 5d. c.i.f., and Madras at 1s. 4d. c.i.f.

ARROWROOT is strong and dearer: St. Vincent is 10d. to 11d. for fair to good manufacturing, and 1s. per lb. for grocery.

CADMIUM.—As previously indicated, the influx of supplies from various quarters, especially Australia, has assumed more important and regular dimensions, which is helping to keep down prices. On the other hand, the development of the consumptive demand has been very satisfactory. Quotations range well upward of 2s. 6d. per lb.

CAMPHOR (REFINED).—Japanese 2½-lb. slabs are easier at 3s. 5d. per lb. on the spot, and for January-March shipment 3s. 4d. c.i.f. is quoted.

CARAWAY SEED is very firm on the spot, and the market is, if anything, dearer at 125s. for Dutch; Morocco is 85s. Offers of new crop for August-September shipment have been made at a considerably lower figure at about 75s. c.i.f., but on account of the speculative nature of the position have not attracted much attention.

CASCARA SAGRADA is a feature of the week among crude drugs, owing to a considerable quantity having changed hands among dealers at from 130s. to 135s. per cwt. for one- to three-year-old bark respectively, but on Wednesday 142s. 6d. was paid for three-year-old and 150s. is now asked.

The landings in London during January amounted to 53 tons, and the deliveries to 17 tons, leaving a stock of 68 tons, against 39 tons in January last year.

CLOVES.—Zanzibar are steady at from 1s. 2d. to 1s. 3d. per lb. on the spot as to quality. To arrive, there are sellers of January-March shipment at 1s. 1¾d. per lb. c.i.f., and for March-May shipment 1s. 2d. has been paid. The weekly wharf statistics show 397 bales landed and 1,345 delivered, leaving a stock of 32,175 bales, against 1,014 bales in 1923 and 12,506 bales in 1922.

COD-LIVER OIL.—Owing to the small fishing results several inquiries have been made by consumers as to 1924 prices, in response to which cables from Norway have indicated 110s. to 115s. per barrel, which offers, however, are quite speculative. Our Bergen correspondent writes on February 11 that the codfishery at Lofoten was again hindered by stormy weather. Consequently the results were poor. The output was (compared with that of the preceding years) as follows:—

	Catch of cod.	Yield of refined steam c.l.o.	Livers for crude oil.
Feb. 2, 1924 ..	1,000,000	2,422 hectol.	1,900 hectol.
" 3, 1923 ..	1,400,000	2,452 "	2,124 "
" 4, 1922 ..	1,300,000	2,141 "	238 "
" 5, 1921 ..	1,200,000	1,569 "	377 "
" 7, 1920 ..	500,000	883 "	409 "

The market is firm, and since my cable of February 5 the price has risen several kroner, but sales are small, owing to the limited stock of old oil and the insignificant supplies of new. For 1923 quality 103s. to 105s. per barrel c.i.f. London is quoted. (See cable for latest price.)

GINGER is dearer both on the spot and forward, and there seems little prospect of any reaction at present, as crops everywhere are small, with consumption maintained. Washed rough Cochin is 95s., and for January-March shipment 81s. c.i.f. has been paid. Calicut is 95s. spot, and dark wormy has sold at 90s.; Cochin B cut 135s., and C 110s. per cwt. Sales of Sierra Leone have been made at 90s., and Japanese at 100s. per cwt. Higher

prices are asked for new-crop Jamaica; stocks in London are small, with little in importers' hands.

HONEY continues in demand and prices are still rising, and nothing is now obtainable below 50s. per cwt., this being dark Jamaica quality.

IPECACUANHA remains very firm, with further sales of Matto Grosso at 10s. per lb., but it is doubtful if sellers can be found at this price, the nominal value being 10s. 6d.

The landings in London during January were 31 packages Matto Grosso, and the deliveries 33 packages, there being no landings or deliveries of other descriptions. The stock at the end of January was 222 Matto Grosso, 2 Minas, 7 Cartagena, and 7 East Indian.

JUNIPER BERRIES.—Good Italian offer at 17s. 6d. per cwt. on the spot.

LIME JUICE.—There has been a good demand for West Indian, which is scarce, spot value being 2s. 6d. per gallon for good quality. Market has a rising tendency owing to U.S. buying at the source.

MENTHOL is slow of sale and easier; several small parcels have arrived, and as these have not found buyers, 57s. per lb. is now asked for Kobayashi-Suzuki. The arrival price for January-March shipment is given as 51s. c.i.f., but as these are second-hand sellers they probably do not possess the menthol.

MERCURY.—If anything the feeling is a little firmer again, this being attributed to a slightly better demand and the comparatively small stocks held in this market. The bulk of the quantities available apparently consist of Italian, there being virtually no Spanish, while Italy is not pressing further offers in this market. It does not necessarily follow, however, that the market will improve much, although it is reported that the surplus at the Spanish mines is small, due to the large sales made in the course of the year and the temporary interruption of production until last October. Current quotations stand at £9 15s. to £9 17s. 6d. per bottle, with a few buyers at the lower figure.

NUTMEGS are again higher, Singapore 80's having been sold up to 1s. 9d. per lb., and there is little offering. Mace continues scarce and dear, 3s. per lb. being the nominal price.

OPTUM remains firm, the London spot price for Turkey druggists being from about 2s. 9d. to 2s. 10d. per unit, and to arrive 11½ per cent. is quoted at 32s. per lb. c.i.f.

CONSTANTINOPLE, February 5.—“During the period January 22 to date arrivals amounted to: Druggists', 1,432; 'softs,' 92; and Malatia, 99 cases, and the stocks consisted of: Druggists', 200; 'softs,' 20; and Malatia, 4 cases. During the past fortnight 107 cases were sold, of which 91 cases included adulterated and manipulated opium, rejections and genuine drug, fetching £T20.50 to £T30, and £T32 to £T36 per oke, while 16 cases of 'softs' realised £T37.50 to £T42 per oke. In addition to these sales, speculators have thrown on the market 30 to 35 cases, which were immediately purchased for export. In view of the depleted stocks, these large purchases have naturally influenced the market, and the tendency favours rising prices. The Anatolian firm, to which reference was made in previous reports, and which held a stock of 170 cases, has up to the present sold 30 to 35 cases, advancing its price by £T2 per oke on each sale of 10 cases, and has decided to follow this course in regard to future sales. Basing ourselves on advices received from London, we mentioned in our report of September, 1923, that large purchases for Japan had been negotiated in London, and on October 20 we were able to state that the transaction covered 300 cases, at 19s. per lb., for a drug with a morphine content of 11 per cent. The Constantinople firm entrusted with the task of making the necessary purchases has been buying regularly, but slowly, in the hope that prices would decline. The exact contrary has taken place; prices have advanced continuously, and this firm has been compelled not only to pay higher prices, but also to purchase a considerable quantity of rejections (déchets) and drug of inferior quality to secure, so far, 200 cases, and in order to acquire the remaining 100 cases necessary to complete the transaction it will certainly have to pay much higher prices than those hitherto quoted. At Smyrna only 14 cases of druggists' were sold at £T32 to £T34 per oke. Small sales were made at Salonic, at 131s. per oke, and according to our calculations the last sales there work out at 33s. to 36s. per lb., for 11½ per cent. opium (Harrison). This ex-

plains the number of sales made for delivery in that town. The heavy snowfalls of January have not yet melted, and it is feared that this may prejudice the sowings."

ORRIS.—Italian remains very cheap, Florentine offering at from 32s. to 34s. per cwt. on the spot, according to quality.

PEPPER is quiet, with fair black Singapore offering at 4½d. per lb.; to arrive, January-March and March-May shipment is quoted at 4½d. per lb., c.i.f. London for f.a.q. Lampong is 4½d., fair Tellicherry 5d., and Alleppy 4½d. per lb., all spot. White Muntok is 7½d. per lb., and March-May shipment has been sold at 7½d. c.i.f. d.w.

PIMENTO remains firm at about 2½d. per lb. on the spot.

RUBBER.—Since our last report prices have been unchanged. During the past few days between 700 and 1,000 tons of spot rubber has changed hands. Whether the purchases have been made against definite orders from abroad or whether for speculative account it is difficult to say. One noticeable feature was that in spite of these large purchases the market only improved ½d. per lb.; this goes to illustrate the stagnation and lack of interest that is being shown by both merchants and manufacturers. America has firmed up a little, and we find there are more inquiries from that quarter; however, their bids are still below the London parity, but this constant "nibbling" shows they are not quite able to secure all their wants from the East at the moment. Deliveries last week were substantial—viz., 1,842 tons—while arrivals totalled 1,431 tons, with a decrease of 411 tons in the stocks. Quotations (Wednesday, 5 p.m.): No. 1 standard crêpe and ribbed smoked sheet, spot and February, 1s. 2d.; March, 1s. 2½d.; April-June, 1s. 2½d.; July-September, 1s. 2½d.

SAFFRON.—The market is still very firm for Valencia at from 135s. to 145s. per lb.

SEEDS.—The seed market is still quiet, with little or no change since last week. The following are spot prices:—Spanish ANISE, 75s. to 80s., and Russian 62s. 6d. CANARY SEED.—Mazagan is still firm at 24s. 6d. per cwt., but very little business is passing. CORIANDER SEED, sound Morocco 45s., wormy 35s. to 37s. 6d.; CUMIN SEED, Malta 115s., Morocco 115s.; DILL SEED, 21s. 6d.; FENNEL SEED, Indian, 40s. to 45s.; FENUGREEK SEED, Morocco 24s., and Spanish 20s.; HEMP SEED, Manchurian, 28s. 6d.; LINSEED, Morocco, 26s.; MUSTARD SEED, English, 36s. per cwt.

SHELLAC.—There was a sharp improvement since our last, which was largely a translation of the stronger aspect of the market at Calcutta, which according to private advices is due to important new buying for shipment to the United States. The outgoings for the trade have been on a good scale on the upward trend of prices. The spot price of usual standard TN orange quality closes at 285s. per cwt.; good to fine second orange is 310s. to 370s., AC cakey 290s., and GAL 265s. The sales for delivery include March at 280s. and May at 275s.

WAHOO BARK OF ROOT continues very scarce on spot, and can only be bought to arrive at about 5s. 9d. c.i.f.

WAX (BEES').—At auction 111 bales African sold for account, of whom it may concern, at from £5 5s. to £5 7s. 6d. per cwt. for yellow, salvaged, all faults. Privately, East African is scarce, and is worth £5 10s. per cwt., compared with 95s. a few weeks ago.

Essential Oils

THERE has been a good demand for bergamot oil on the spot and West Indian lime has also been selling. Spanish spike is still expected to advance. Bourbon geranium has improved at the source, but arrivals of oil have made the spot position easier. Japanese mint oil, after a slight decline has again improved. Bois de rose and Paraguayan petitgrain are firmer.

The following are the quantities and values of the essential oils (other than turpentine) imported into and re-exported from Great Britain for January 1924, compared with the same month of 1923 and 1922:—

	1922	1923	1924
January imports (other than turpentine)	lb. 291,280	392,775	326,105
.. .. value	£68,224	£86,682	£89,087
January re-exports	lb. 68,050	66,390	91,777
.. .. value	£31,069	£28,422	£25,444

ANISE (STAR).—"Red Ship" is quiet at 1s. 9½d. per lb. on the spot, and for shipment 1s. 8½d. is quoted.

BERGAMOT has been in good demand. Cheap spot parcels have been cleared and up to 14s. 6d. per lb. has been paid for good quality 37 to 39 l.a. Spot is firm at from 14s. 6d. to 14s. 9d. as to seller. February-March shipment is quoted at 14s. 6d. c.i.f.

BOIS DE ROSE (FEMELLE).—Cheaper spot offers have been withdrawn and quotations are firm at from 15s. to 15s. 6d. per lb.

CAJUPUT is in steady demand with spot sellers at 3s. 3d. per lb.

CASSIA is very firm on the spot at 8s. 6d. to 8s. 9d. per lb. for 80 to 85 c.a. One holder quotes 9s. From 6s. 3d. to 6s. 6d. c.i.f. is wanted for February-March shipment.

CINNAMON.—Ceylon leaf is unchanged at 5½d. per oz. on the spot. Mysore is 8s. 6d. per lb.

CITRONELLA.—Ceylon is a shade easier on the spot at from 3s. 6d. to 3s. 7d. per lb. The price to arrive is unchanged at 3s. c.i.f. Java is firm on the spot at 4s. 8d.

CLOVE.—English distilled has been in demand, distillers' price for quantity being 8s. 6d. per lb. for B.P. oil and 8s. 9d. for higher eugenol content.

DILL.—Spot holders quote 25s. per lb. for East Indian and 27s. for B.P.

EUCALYPTUS.—Spot is quiet and on the easy side at from 2s. 2d. to 2s. 3d. per lb. for 70 to 75 per cent. cineol.

GERANIUM.—The price of Bourbon, which had declined to 225 fr. (=22s. approximately) per kilo, has again advanced to 240 fr. (=24s. approximately), as a result of active demand. Spot sales have been made recently at from 30s. to 31s. For parcel landing, 28s. 6d. is quoted and 25s. for afloat. On the spot, Algerian is steady at from 28s. to 30s.

JUNIPER BERRY.—B.P. oil is selling on the spot at 4s. 3d. per lb.; up to 4s. 9d. is asked for small lots. Wood oil is 2s. 3d.

LEMON on the spot ranges from 2s. 10d. to 3s. per lb. for usual brands, and 3s. c.i.f. is the price quoted to arrive.

LIME.—West Indian distilled has been in demand at 4s. 6d. per lb., which is reported paid. Hand-pressed is rather firmer at 7s. 6d.

MANDARIN.—On the spot about 29s. per lb. is quoted.

MINT.—Japanese demethylised Kobayashi-Suzuki was weaker earlier in the week, but at the close there was a fair demand at 13s. 6d. per lb., and small lots are quoted at 13s. 9d. For shipment afloat 12s. 6d. c.i.f. is reported paid; re-sellers, January-March shipment, quote 12s. c.i.f.

ORANGE.—Sicilian on the spot is unchanged at 11s. 3d. to 11s. 9d. per lb. as to seller. West Indian sweet has been in demand at 9s. 6d. per lb. and sellers. There are no c.i.f. offers below this price. For bitter 9s. is quoted on the spot.

PALMAROSA on the spot is unchanged at 17s. 6d. per lb. Sixteen pots have arrived from India at London. These have mostly been sold to arrive.

PENNYROYAL.—For retail lots 12s. per lb. is quoted. Quotations for next crop in July-August are now being made at much lower prices.

PEPPERMINT.—There is a little more inquiry for American natural tin oil, which is firm at 16s. per lb. on the spot. For some brands up to 16s. 3d. c.i.f. is quoted.

PETITGRAIN.—Demand has improved and spot holders of Paraguayan quote 8s. 6d. per lb., but the c.i.f. price to arrive is 9s. 3d.

SPIKE.—Spanish continues to advance at the source, and, according to current reports, supplies are nearly exhausted. The spot price is still lower than replacement figures. Sales have been made at 4s. 9d., but the minimum spot quotation is now 5s., with 5s. 6d. asked in some directions.

WHTIVERT.—Bourbon is scarce on the spot at from 31s. to 32s. per lb.

WINTERGREEN (Sweet Birch Oil).—The Customs' decision to levy Key Industries duty on sweet birch oil as methyl salicylate may result in a cessation of imports until an appeal is made. On the spot prices are already considerably higher.

Pharmaceutical Chemicals, etc.

THE unsteady tone and gradual weakening of the spot market is still in evidence. This week no great change in prices is recorded, but in many items the tendency is for values to decline. Business during the past week has been for small quantities only in view of the uncertainty as to the future.

ACETANILIDE has been quiet throughout, but owing to the limited supplies available the spot price is fairly steady in the region of 3s. per lb.

AMIDOPYRIN remains neglected, with offers at about 14s. per lb. finding hardly any business.

AMMON. BENZOATE continues to be quoted at about 3s. 9d. per lb.

ASPIRIN.—The spot position has weakened of late and business has slackened off. Dealers are now offering in the region of 3s. 6d. to 3s. 7d. per lb. for good brands, for quantities. Sales might be a shade less.

BARBITONE continues to be offered at about 16s. 6d. per lb., but buyers are hard to find.

BENZONAPHTHOL is scarce at from 5s. 9d. to 6s. 3d. per lb.

BROMIDES are rather unsteady on spot, and some offers of Continental to come forward are said to be at much cheaper rates than those quoted on spot. Ammonium, about 8½d. per lb.; potassium, B.P. crystals and granular, 7½d. to 8d. per lb.; sodium, B.P. crystals and granular, about 8½d. to 8½d. per lb.

CALCIUM LACTATE is being maintained on quotation at 2s. per lb., but any business would possibly be at a shade under this figure.

CHLORAL HYDRATE.—Duty paid is available on spot, with no great amount of inquiry. Dealers quote at about 3s. 9d. to 4s. per lb.; market is weak.

CHRYSAROBIN.—Makers will not sell below 9s. 6d. per lb., which is an advance on their previous price. No raw material is obtainable even for forward shipment.

CITRIC ACID.—B.P. is about 1s. 5d. to 1s. 5½d. per lb., less 5 per cent.; at this rate the market is firmer, despite lack of good business. It would not be surprising to see matters improve here. Italian makers' prices to arrive are dearer. German offers appear to be the cheapest.

CREOSOTE.—B.P. continues to be offered at about 2s. 5d. per lb., but the market has not been at all active.

CREOSOTE CARBONATE is nominal on a lifeless market at about 6s. 9d. per lb.

GALLIC ACID is steady at 3s. per lb. for pure crystals.

GUAIACOL CARBONATE continues fairly steady, but meeting with little business; dealers offer at about 13s. per lb.

HEXAMINE seems to be weakening, although dealers' prices are being maintained. Quoted from 3s. 9d. to 4s. per lb., according to quantity.

HYDROQUINONE has been in fair request and prices are rather cheaper, with good quantities moving off from 3s. 6d. to 3s. 9d. per lb.

MAGNESIUM OXIDE.—Heavy commercial is offered at £26 per ton.

METHYL SALICYLATE has weakened and spot prices are now down. Quoted at about 2s. 10d. per lb., but sales would probably be at slightly lower rates.

METHYL SULPHONAL shows little life at present. Dealers quote in the region of 21s. to 22s. per lb.

PARAFORMALDEHYDE continues fairly steady, with the demand small. Dealers offer from 3s. 6d. and upwards per lb.

PARALDEHYDE has been quiet of late, with prices in the region of 1s. 6d. per lb.

PHENACETIN has cheapened and is now offering at perhaps a shade under 7s. per lb. Business slow.

PHENAZONE has moved in buyers' favour and dealers are now offering close up to 7s. 9d. per lb., with the demand small.

PHENOLPHALEIN is steady as last quoted at about 8s. per lb.

POTASSIUM PERMANGANATE (B.P.) continues fairly steady, but rather quiet at about 9d. per lb.

POTASSIUM SULPHOGUAIACOLATE remains neglected, with dealers' prices about 6s. 6d. per lb.

RESORCIN keeps steady and meets with a little business; dealers quote in the region of 6s. per lb.

SALICYLIC ACID is cheaper on the week, makers quoting B.P. at about 2s. 1d. to 2s. 2d. per lb., but supplies are not very plentiful. Technical is easier at about 1s. 5d. per lb.

SALOL is being maintained on spot at about 3s. 9d. to 4s. per lb.; business quiet.

SODIUM BENZOATE is quoted at about 3s. 3d. per lb., and tends to move to slightly cheaper rates.

SODIUM DIETHYLBARBITURATE is seldom inquired for; dealers' prices are from 18s. 6d. to 20s. per lb.

SODIUM SALICYLATE has cheapened and closes rather unsteady with the market still weak. B.P., crystals about 2s. 9½d. to 2s. 10d. Powder, 2s. 10d. to 3s. 1d. per lb.

SULPHONAL remains idle, with dealers' prices quoted at 17s. 9d. to 18s. 6d. per lb.

TARTARIC ACID.—B.P. crystals are freely offered from spot supplies, but business is very slow. Prices are irregular and in some instances down to about 1s. 1d. per lb., less 5 per cent. Makers quote 1s. 1½d.

TERPIN HYDRATE continues steady, with dealer's price at 1s. 9d. per lb.

THYMOL is unchanged on the week as offered at 13s. 6d. to 14s. per lb. for good white crystals from ajowan seed.

The following average prices are quoted by British makers: Camphoric acid, 20s. to 18s. per lb. Bismuth salts: Carbonate, 14s. 9d. to 12s. 9d.; subnitrate, 12s. 9d. to 10s. 9d.; citrate, 13s. 4d. to 11s. 4d.; salicylate, 12s. 2d. to 10s. 2d.; cadmium sulphate, 4s. 6d. to 4s. 3d.; ether, s.g. 0.720, 1s. 6½d. to 1s. 2½d.; purif. ex S.V.M., 2s. 2d. to 1s. 10d. per lb.; iron ammon. citrate, B.P., 2s. 3d. to 1s. 11d.; iron ammon. citrate, U.S.P., 2s. to 1s. 8d.; iron ammon. citrate, green, 3s. to 2s. 6d. per lb.; phosphoric acid, s.g. 1.750, 1s. to 11d. per lb.; potass. acetate, 1s. 4d. to 1s. per lb. Potash citrate, 2s. to 1s. 8d.; sodium citrate, B.P.C., 1s. 9d. to 1s. 5d.; sodium citrate, U.S.P., 2s. to 1s. 8d.; sodium nitro-prusside, 16s. per lb.; sodium sulphide, pure recryst., 1s. 2d. to 10d.; terebene, 2s. 8d. to 2s. 6d. per lb.; boric acid, B.P., crystals, £54 per ton, powder £58, carriage paid to any station in Great Britain; gallic acid, 3s. per lb. for pure crystals; pyrogallie acid, 6s. per lb. for 28-lb. lots of crystals; tannic acid, 3s. 3d. per lb. for B.P.; amidol, 9s. 9d. per lb., delivered; ammonium carbonate, £35 per ton; chloroform, 2s. per lb. in cwt. lots; potassium iodide, 16s. 8d. to 17s. 5d. per lb.; silver proteinate, 9s. 6d. per lb.; soda metabisulphite cryst., 37s. 6d. to 60s. per cwt. net; tartar emetic, 1s. 4d. per lb. As intimated last week, the following reduced prices are in operation for mercurials:—Ammoniated lump (white precipitate) 4s. 2d., powder 4s. 3d., extra fine powder, 4s. 4d.; bichloride lump B.P. (corrosive sublimate), 3s. 1d.; bichloride powder or granular, 2s. 11d.; chloride B.P. (calomel), 3s. 6d.; red oxide cryst. B.P. (red precipitate), 4s. 10d.; red oxide, levig. B.P., 4s. 4d.; yellow oxide, 4s. 2d. per lb.; one-cwt. lots are 1d. per lb. less.

Among the imported chemicals which have paid Key Industries Duty are the following, the figures representing the value of the goods plus duty:—Guaiacol carbonate, £112; quinine ethyl carbonate, £241; soda crystals, £205; undescribed chemicals, £307.

Industrial Chemicals, etc.

London, February 13.

NOTHING in the way of improvement in the volume of business can be recorded in this section. The tone on spot is a long way from firm in many directions, and this unsteadiness is no doubt the cause of the distinct lack of buyers. It is considered likely that the Government will shortly make some change in the German Reparation levy of 26 per cent. in the near future, which since November last has been borne by British importers, and has had to be calculated in the ultimate selling price. Should the levy be removed or reduced, the spot position in many items will be affected accordingly.

ACETIC ACID has not been in any great demand, but with small spot supplies and Continental offerings fully maintained, prices are not likely to fall to any extent. 80 per cent. technical, £47; 80 per cent. pure, about £50; 98 per cent. glacial, £70 per ton, in glass demijohns, ex wharf, London.

ACETONE, after last week's considerable cut in spot values, is fairly steady, but the market remains quiet. British Government specification is about £116 per ton, in drums.

AMMONIA ALKALI.—British makers' price for home trade only is unchanged.

ARSENIC.—Reliable quotations are difficult to obtain in the absence of notable business. It is understood that American importers continue to take fair quantities, chiefly against current contracts, and it is believed that merchant stocks in America have been accumulating somewhat but that these will be eventually all wanted shortly. Best Cornish powder, delivered London, may be called about £66 10s. to £67, while the mines are asking £54 10s., f.o.r. Japanese is mentioned at £65 10s., c.i.f., and even more. Grecian is not offering for the moment.

BARIUM CHLORIDE is steady at dealers' recently cheapened prices of £14 10s. to £15 per ton, but business is not at all brisk.

BLEACHING POWDER has been in a little better request of late, with dealers quoting about £10 to £10 10s. per ton for 35/37 per cent.

COPPER SULPHATE is practically unchanged, the export demand being still restricted, but makers resist concessions, asking fully £25 to £25 5s., f.o.b., for casks.

CREAM OF TARTAR has been on the slow side, but the market is certainly steady as quoted from 85s. to 87s. 6d. per cwt. for B.P. in one-ton lots, less 2½ per cent.

EPSON SALT on spot is called for now and again, and dealers' offers at £5 10s. to £6 per ton for spot are well maintained.

FORMALDEHYDE has had a week of poor business. Dealers' prices are somewhere in the region of £62 to £63 per ton for 40 per cent. volume.

GLAUBER'S SALT of commercial quality is steady and in fair demand as offered on spot at £4 to £4 5s. per ton, in bags.

LEAD ACETATE.—Owing to short supplies on spot and dear offerings from the Continent, the spot prices are well maintained: Brown, £44 10s.; white, £45 10s. per ton.

LEAD PRODUCTS.—Importers' prices are again rather firmer. They are meeting with a moderate demand. Red lead and litharge, about £38 per ton; white lead, fully £42 per ton.

POTASH CAUSTIC.—Spot is available, but demand during the past week has been small. Dealers' prices are close up to £32 per ton, for solid, in drums.

POTASSIUM CARBONATE is about level on the week, with sales from spot: supplies small: 90 to 92 per cent., about £25 10s.; 96 to 98 per cent., £27 to £27 10s. per ton.

POTASSIUM CHLORATE shows no change, and not much interest in offers at about 2½d. to 3d. per lb., according to quantity.

POTASSIUM PERMANGANATE of commercial quality is very steady, but in poor request: dealers quote at about 8½d. per lb.

POTASSIUM PRUSSATE is again weaker. Dealers are now offering British at 8½d. per lb. Business is still confined to little lots.

SODIUM ACETATE remains unchanged on a steady but dull market. Dealers' price about £23 10s. per ton, on spot.

SODIUM BICARBONATE is £10 10s. per ton, in bags, carriage paid to destination. British makers continue to quote at this figure for home trade only.

SODIUM BICHRONATE continues to be offered by British makers for home trade only at 4½d. per lb.

SODIUM HYPOSULPHITE is steadier as regards dealers' prices and a moderate business has been done. Pea crystals, £15 per ton in one-cwt. kegs; commercial quality, about £10 per ton, in casks.

SODIUM PRUSSATE.—Dealers offering British continue to make reductions in their prices and are now quoting at 5d. per lb. There is still nothing but small business coming on the market.

SODIUM SULPHIDE remains dull, with dealers' prices for solid at £15 per ton, and £1 more for broken 60 to 62 per cent., in drums.

SODA CAUSTIC.—Dealers' prices are as follows: 70 to 72 per cent., £15 10s.; 76 to 77 per cent., £17 10s. per ton, in drums, ex wharf, shipping port. British makers' prices to domestic consumers on contract are: 70 to 72 per cent., £17 17s. 6d.; 76 to 77 per cent., £19 7s. 6d. per ton, in drums, carriage paid to any station in Great Britain.

SODA CRYSTALS (carbonate) from British makers for home trade only are unchanged at £5 5s. per ton, in bags, carriage paid to destination in Great Britain.

SULPHUR.—A moderate amount of business is reported. American or Sicilian crude ranges from £5 5s. to £5 10s., delivered Manchester, and quotations for refined stand at £9 7s. 6d. to £9 10s. for Sicilian flowers and £7 12s. 6d. for roll, delivered ex warehouse London.

ZINC OXIDES.—British makers have this afternoon notified the following advances in their prices, f.o.r. works: B.P., £54; white seal, £47; green seal, £42; red seal, £37 to £38

COAL-TAR PRODUCTS, ETC.—A number of further declines in quoted rates are recorded, and the general tone of the market is far from good. Business has remained quiet. ANILINE OIL, ex works, naked, is unchanged on quotation at 8½d. per lb. ANILINE SALT is steady at 9d. per lb., naked, ex works; demand small. BETANAPHTHOL is unchanged at about 1s. 1d. to 1s. 2d. per lb. on a quiet market. TOLUOL shows no change on the week: Pure, 1s. 9d.; 90's, 1s. 3d. to 1s. 4d. per gallon. XYLOL, pure, 2s. 3d.; commercial, 1s. 6d. per gallon; market dull and values unchanged. CREOSOTE OIL has cheapened after the recent advances, and is now quoted at 8½d. per gallon, ex works, and about 9½d., f.o.b. CARBOLIC ACID is somewhat steadier after the recent decline, and the chief makers maintain their quotations, based on the cost of raw materials, at from 7½d. to 8d. per lb., f.o.b., for 39° to 40° C. crystals in the usual 3-cwt. drums. In merchants' hands endeavours have been made to depress prices of late. Crude 60's is 1s. 10d. to 2s. per gallon, with rather more inquiry. CRESYLIC ACID is steady on a quiet market at 1s. 11d. to 2s. 1d. per gallon. NAPHTHALENE is still dull, but the market is steadier at last week's lower price of about £16 per ton. Makers quote crystals and flaked at £18 per ton. PYRIDIN shows a further decline in value and is now quoted by dealers down to 13s. 6d. per gallon. HEXAMETHYLENE is steady and meeting with some inquiry; quoted at 4s. per gallon. Pure METHYL ALCOHOL is quite steady as quoted by dealers in the region of £30 per ton, in drums, ex wharf, London. PITCH has been on the decline for some weeks, falling from something like 170s. per ton. To-day the position is still unsteady on the quoted rate of 54s. per ton; business is very difficult. Makers quote 57s. 6d. to 60s. per ton. WOOD TAR shows no change on the week at from £4 15s. to £6 per ton.

Fixed Oils, etc.

As a whole, this market has had a fairly good week of business, and the few alterations in prices are of no material extent. The tone of the spot position keeps firm. Palm oils have been in good demand and rates are maintained. Linseed oil is rather unsteady at the close, and turpentine has been quieter. ACID OILS.—Spot values are lower, but the market closes firm: Coconut-palm kernel, 42s.; groundnut, 38s.; soya, 38s., all spot. CASTOR.—Ex mills, Hull prices have moved back to their former level, with the market firm: Pharmaceutical, 65s.; first pressings, 60s.; second pressings, 59s., all spot, in barrels in not less than one-ton lots. COCONUT.—Prices are steady at unchanged rates, with the market still dull. Deodorised, spot, 55s.; Ceylon, 48s. 6d., c.i.f.; Cochin, 60s., c.i.f. COTTON has been more active and prices gradually hardening, closing at higher rates for all grades: Deodorised, 53s. 6d.; common edible, 52s.; soap-making, 48s.; crude, 45s. 6d., all spot. GROUNDNUT.—Deodorised on spot holds firm at level rates of about 61s.; crude Oriental is quoted at 55s., c.i.f. LINSEED (raw, naked).—Since last week's report prices for all positions hardened to higher rates, but latterly, and up to the close, the market was much quieter and the tone unsteady. On spot, 49s.; February, 45s. 6d.; March-April, 41s. 3d.; May-August, 38s. 1½d.; September-December, 37s. 7½d. Hull, on spot, 45s. 9d.; February, 43s. 10½d.; March-April, 39s. 3d.; May-August, 37s. 9d. PALM KERNEL keeps steady with little change in values, Deodorised, 50s. 6d.; crude, 44s. 6d., all spot. PALM.—For some days early in the week the tone of the spot market was inclined to weaken, but latterly matters have improved and the market closes firm at about level rates. Lagos, 41s.; softs, 39s.; mediums, 39s.; hards, 38s. 6d.; bleached, 42s. 6d., all spot. RAPE.—Prices on spot have advanced and the market closes firm. Refined, 53s.; crude, 50s., all spot. SOYA.—A slight advance is recorded, with the market firm and active. Deodorised, 51s.; crude, 46s. 6d., all spot. TURPENTINE.—After a set-back late last week the undertone steadied again and there has been a fairly good demand since. Market on spot closes at 77s. 9d.; March-April, 78s. The tendency in America has been uncertain and the turn easier, Savannah having slipped back to about 94 cents. Good deliveries were made from stock here, totalling for last week about 2,000 barrels, including some 500 barrels French. The total stocks were returned at about 25,000 barrels American and 900 barrels French. WOOD.—Hankow, in barrels, is still neglected, as offered on spot at 95s.



An Old Essex Business

SIR,—I have just read your sketch of my old establishment at Colchester (*C. & D.*, February 9, p. 194), which gives an accurate and interesting account of this old-time chemist's and druggist's business. I note you state that "it would be interesting to know whether Mr. Smith had begun the manufacture of his own Digestive Candy while candied eryngo was still in existence." Undoubtedly the candied eryngo and the Digestive or Live Long Candy did appear side by side upon the counter at this shop, for I have records (mostly warehoused) showing exactly the amount of Digestive Candy made each year from 1844 (or thereabout); but as the first record shows quite a large sale, it must have been made some years earlier than that. No doubt Digestive Candy was first made during the late thirties of the last century, and candied eryngo was sold in the same shop well into the sixties of the century; therefore the sale of these two candies must have coincided during the time that Smith & Shenstone acted as agents for the eryngo. The cause of the discontinuance of the sale of candied eryngo was that the supply of eryngo roots from the Essex coast (Clacton-on-Sea and Great Holland) was practically exhausted. (Only the old, deep-growing roots were used.) I might mention that I sold my business in 1905 to two pharmacists (brothers) from Suffolk, whose names I cannot for the moment recall, and from whom Mr. Head purchased a very few years later. . . . Since writing to you I have heard that Miss Thorn (the last maker) for a short period made the candy on North Hill, Colchester, where she conducted a "school for young ladies"—this after it had been made for centuries in High Street, Colchester, as stated in your sketch.

Yours faithfully,
J. C. SHENSTONE.

London, S.W.16.

Purchasing Drugs for China

SIR,—In further reference to Mr. John Cameron's letter in the *C. & D.* of November 17 (p. 703), the laid down cost in Tientsin, including import duty of the items named is as follows:—

Bismuth carbonate lb.	7.10	Hyd. iodid. rub. . . lb.	8.00
Bismuth subnitrate lb.	6.25	Hyd. oxid. flav. . . lb.	2.75
Bismuth subgallate lb.	5.90	Hyd. perchlorid. . . lb.	2.50
Quinine sulphate . . oz.	1.80	Hyd. subchlorid. . . lb.	3.15
Hyd. oxid. rub. . . lb.	3.60	Strychnine sulphate oz.	1.50

These are prices taken from 1923 invoices and not made up from price lists, as is evident in the case of those given by your correspondent as prevailing on the same date as his letter October 16. Price lists take five weeks or more to come out to China, so that unless Mr. Cameron's prices were cabled c.i.f. Peking they have no value, and it is doubtful if any London house would risk c.i.f. quotations to Peking. All prices quoted by me are from invoices by well-known London firms. Freight from Tientsin to Peking is \$0.53 per cwt.; interior dues, 2½ per cent. *ad valorem*, and Peking octroi is 3½ per cent. From the above prices it seems as if the P.U.M.C. are not buying in the cheapest market.

Yours faithfully,
QUID PRO QUO.

Tientsin, N. China,
December 25.

A Price-cutting Case

SIR,—Referring to the remarks of "Xrayser II" on the P.A.T.A. and R.P.U. (*C. & D.*, February 9, p. 197), the P.A.T.A. has control of the situation with regard to the articles on its list, and can deal with the price-cutter. It controls the terms of supply between manufacturer, wholesaler, and retailer. The R.P.U., in

publishing its Minimum Retail Price List, has no such control. Its list, or any other similar list, can only be an opinion as to what is a fair retail price for any particular article. The list is useful, but carries no authority and cannot be enforced. It is not an agreed list, there is no penalty for breaking from it; on the other hand, the P.A.T.A. can exact a penalty by stopping supplies. I did not advocate price-cutting last week, as "Xrayser II" suggests. But I do advocate retaliation. Retaliation begets retaliation, as "Xrayser II" says, but it often begets a desire for compromise or agreement on the part of the cutter, if made hot enough. What other line of business accepts price-cutting without retaliation? Steamship companies, railways, tramways, motor-buses, every form of commercial life retaliates on the price-cutter, whether it is the way to madness or not. If the past generation of pharmacists had retaliated on the young drug companies, the position might have been different to-day. Who but a chemist would have adopted the sit-on-the-fence, too-proud-to-fight attitude of the chemist of that day—and of this also to a great extent? Without machinery such as the P.A.T.A. possesses, any attempt to regulate prices is doomed to failure. There always will be the man who wants his neighbour's living as well as his own.

Yours, etc.,

PROVINCIAL (11/2).

SIR,—Having read "Xrayser II" and the letters with regard to deviations from the prices given in one or any retail price list, one is led to assume that an altogether wrong construction is put upon the value of such lists. The first list, I believe, appeared during the war in the "B. & C.D." and was intended to keep chemists *au fait* with the fluctuations that were taking place, so as to prevent any loss through lack of knowledge of the market price, and to counterbalance the time when prices should begin to fall again to normal, and stocks decrease in value. Now that prices all round have reached a fairly stable level, every retail chemist has to provide for local conditions, in the way of competition, etc., and one can only say that those who are still able to adhere to the prices given in any of the lists published are most fortunate. They should have to carry on business as many have to do in industrial areas, where one finds borax at 4½d. lb., spt. aether. nit. at 6d. oz., tr. rhei. co. at 5d. oz., etc., and where with some shops there is a "penny sale" (one article, say, for 5s. and two for 5s. 1d.). A minimum retail list is waste-paper in so far as it can be enforced without some agreement by all with a penalty clause for its non-fulfilment, and, as things are, the local chemists have seriously to consider the competition in their district and act accordingly or lose their already restricted customers. We have been very grateful in the past for these lists, but it is doubtful if for many they have not lost their usefulness except as reminders of our more fortunate brethren who can enjoy the larger profits, and are not situated as the writer and many others are, having to buy and sell keenly.

Yours faithfully,
LANCASHIRE CHEMIST (14/2).

Optical Societies

SIR,—I have to thank the secretaries of the optical bodies for response to my invitation to supply information. Perhaps Mr. Cuff will explain why, if he has been secretary of the Society of Chemist Opticians for twenty years, his membership, according to the Optical Almanac, is only 118, seeing that there are 19,712 chemists on the register, and at least a third of them practising optics? I take it his policy of enrolling chemists, and then advising them to join other outside societies, will account for this. Mr. Owen's letter is very unconvincing. He talks of benefits under National Health Insurance, when all the time it is a private arrangement between a minority of approved societies, who even now, I hear, are considering the advisability of establishing their own clinics; moreover, will he tell us if it is not true that the J.C.Q.O. does number among its members opticians who have never passed an examination of any kind? On due consideration, the younger body has it.

There seems to be real vim behind the Institute, and Mr. Laws has put the case well, and certainly is right when he says that all chemists should join the Institute, no matter to what other society they belong, or what certificate they hold. Chemists should certainly keep together, and they have enough education to carry out their own optical affairs without the aid of non-statutory bodies.

Yours faithfully,
YORKSHIRE (11/2).

Profits on Advertised Proprietaries

SIR,—I venture to say that the time has come when the question whether the P.A.T.A. would exist if all retail pharmacists ceased to subscribe should be subjected to a thorough searching and discussion. Retail pharmacists since the commencement of the Proprietary Articles Trade Association have, with unselfishness bordering on philanthropy, continuously with the full weight of their numbers supported the P.A.T.A. Now that the manufacturers have developed into so powerful a group, and retail pharmacists having so willingly assigned to themselves the position of commission agents for these manufacturers' goods—upon which, by the way, in many cases a ridiculously small commission is paid—the question arises as to whether or not the manufacturers can now stand alone in ensuring the protection of the prices of their innumerable items. Apart from subscriptions, pharmacists, with few exceptions, have discontinued packing or relegated to back premises their own special remedies in favour of patent proprietaries. Therefore I think that pharmacists, for such wonderful support they have always given the manufacturers, should now be excused further annual subscriptions, and that the manufacturers should show their appreciation by allowing a greatly increased commission upon the sales of their goods. Personally, I think the P.A.T.A., as such, has really failed in its object—the prevention of price-cutting. This is proved by the increasing number of pharmacists and drug stores who "run clubs," supplying the club members with all baby foods and protected proprietaries and paying a bonus thereon. So far, I have not heard of any P.A.T.A. action in these cases. Possibly the fact that such dealing comes under the "co-operative" system makes intervention impossible.

Yours, etc.,

MAURICE JONES, M.P.S.

Willesden, N.W.

SIR,—The mind of the retail chemist, unreceptive to all ideas but those which have won the reverence of antiquity, is awakening to the importance of the relations of rate of profit to turnover. Since the war the chemist has been won by fair words and large profits. He has not troubled much about the number of his sales as long as each sale showed a large profit. Proprietary lines he has sold very largely at a protected rate. The Proprietary Articles Trade Association has rescued him from any need to earn an honest living on a competitive basis. It has acted in restraint of trade, and has protected the duffer from the competition of his more competent rival. This has been to the detriment of the development of a higher standard of efficiency in business organisation within the pharmacy. But competition is now making itself felt from outside, and the chemist is being forced back on the fundamental fact that turnover comes before profit. An energetic chemist has power to increase his turnover; he has very little power to increase his rate of profit, and it requires no great business acumen for him to see that it is better to halve his rate of profit and double his turnover than to double his rate of profit (if that were possible) and halve his sales. Turnover can be increased. Rate of profit cannot be increased. If he increases his turnover the values within the shop increase, he gains a much wider publicity, overhead charges on the individual sale decrease, and his business is much more secure, because based on a wider and more extended foundation of public patronage. The chemist complains bitterly that the grocer is snatching the toilet-soap trade from him. This is one instance among many. The reasons for this

loss are to be found within the relations of profit and turnover. The grocer has the turnover—i.e., he has a greater number of customers to tempt with displays of soap than has the chemist; and the customers assume that the grocer sells on a smaller margin of profit, and buy from him as a result. The success of the stores is in no small part due to the fact that the public think they can there buy what they want without trouble at a cheaper price than they can in an ordinary pharmacy. The argument may be advanced that the nature of a chemist's business prevents a large turnover and necessitates high profits. But these very profits have been the means of obtaining for the chemist his keenest competitors. It is not lack of potential customers for lines ordinarily stocked by chemists that is at fault, but the fact that the trade in many of these lines is dissipated over a varied host of small distributors. High prices attract competition in business just as much as high prizes attract competitors in sport. The large profits which chemists, or any other retailer for that matter, obtain by selling, or rather retailing, advertised goods already more than half sold are out of all proportion to the risks run or services rendered. Yet the chemist who is carried on the back of the manufacturer, and has put intolerable obstacles in the way of business, would be strident in his denunciation of any manufacturing house encouraging a mail-order trade. The carboys he displays no longer carry any occult significance, and his reputation for high prices is sending the public to multiple traders. In the past he failed to see that a high rate of profit is against progressive salesbuilding—in other words, increased turnover—and is also anti-social. A small profit and quick turnover mean that money is not tied up on the shelf, but is constantly being put into circulation where it benefits all. More goods are manufactured, factories work full time and unemployment subsides; and in the improved trade that results the retail chemist would find the cares and worries that at present harass him disappear as if by magic.

Oh, wad some power the giftie gie us
To see oursels as ithers see us.

Yours, etc.,

N. D. P. (11/2).

Proved (11/1) writes: I was delighted to see the letters of "Bruno" and "Fairplay" (*C. & D.*, January 5, p. 33) protesting against the prices of proprietary shaving soaps and tooth-pastes. I hope every chemist will hide all showcards and stocks of such firms, get a really good unadvertised brand, make a bold show at a good profit, and put the full force of their personality behind their recommendation. Even big firms can be made to feel a draught!

Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics.

Business Knowledge

Referring to the reply to "W. P. B." in the *C. & D.*, February 9, p. 216, a subscriber of long experience in pharmacy, and a lecturer on business subjects, writes that he will be glad to advise Fairchild scholarship students (free of charge) as to the means of acquiring business knowledge required for the examinations. *Bona fide* candidates are asked to send particulars of their experience to the Editor, when their letters will be dealt with.

An Impudent Customer

A man came to me a little time ago and said that the doctor had sent him to me to have his sight tested. I tested it; he inquired the price, to which he offered no remark. On his stating that he wished to see the doctor first, I made out my prescription and let him have it. No business ensued, and a long time after I learnt that Mr. Clever had gone to a local jeweller and obtained glasses through him. This kind of thing helps one to keep on one's guard.—*Bee Wyse* (7/2).

Legal Queries

T. C. (4/2).—The composition is a factor in determining whether a headache powder is liable to medicine-stamp duty. If it consists of one drug only it may be exempt as an "entire drug" and can then be recommended as a headache remedy without incurring liability.

G. B. (9/2).—(1) A patent-medicine licence is required for each set of premises where sales are made of stamped articles or where they are manufactured. (2) The Business Names Act is in force, and there have been several prosecutions lately for infringement of the Act. The purpose of the Act is to record the names of the real owner of a business carried on under any other name than that of the proprietor.

S. G. (6/2).—The definitions of a factory were given in the *C. & D.*, January 12, p. 59. As you will see from this, a factory includes "any premises where manual labour is exercised by way of trade or for purposes of gain in making, altering, repairing, ornamenting, finishing or adapting, for sale, any article, if mechanical power is used." A butcher's shop where a power-driven sausage machine is installed comes within the above definition.

G. W. (5/2).—A wholesale firm of which the partners are qualified chemists may keep an "open shop" for the sale of poisons and supply the cocaine eye-drops required in the factory first-aid cases. The purchaser and the vendor must comply with the Pharmacy Acts. In the ordinary way of wholesale dealing wholesalers sell to the chemist, but not to the general public, in this case factory owners, or in case of companies the secretary.

W. B. J. (8/2).—The sale of medicaments containing medicinal doses of arsenic and Part I poisons (excluding nux vomica, belladonna, prussic acid, emetic tartar, and the so-called "dangerous" drugs) come within Schedule 2. It applies also to the excluded drugs mentioned above, providing they are present in a percentage below 0.1 for belladonna alkaloids, 0.2 for strychnine, 0.1 for prussic acid, or 1.0 for emetic tartar.

Hook (10/2).—(1) The sale of "dangerous" drugs to a fellow-chemist is dealt with in *The Chemist and Druggist Diary*, 1924, p. 257. We have been unable to get a pronouncement from the Home Office as to the correct procedure in such cases. (2) Infants' foods, feeding bottles and soothers do not come within the Shops Act exemption of "medicines and medical and surgical appliances" unless the child for whom they are required is ill.

N. D. P. (1/2) states that his wife is in an asylum. He wants to realise certain investments which have been made in her name in order to pay for alterations to the premises which he occupies. The premises belong to his wife. How should "N. D. P." proceed? [Before "N. D. P." can dispose of any of his wife's property he must make an application to the High Court for the necessary authority. We suggest that he should consult a solicitor.]

E. T. B. (11/2).—(1) The sale of poisons by wholesale is not confined to chemists and druggists, but the wholesaler is required to state on the label the name of the article and the word "poison." The full details are set forth in *The Chemist and Druggist Diary*. Chloroform is not, however, a scheduled poison until it is present to the extent of more than 20 per cent. (2) A mixture recommended for ailments or for which proprietary rights are claimed is required to pay medicine-stamp duty. The person making and selling it must also take out a patent-medicine licence.

Linctus (21/1).—The formalities involved in putting a proprietary medicine on the market are simple in character. A patent-medicine licence is needed to enable you to manufacture the article, and when it is made stamps representing the value of the medicine have to be affixed in such a manner that the stamps are broken when the user desires to get at the contents of the package. For value of stamps to be affixed see *The Chemist*

and *Druggist Diary*, 1924. The licence is obtainable at the local Inland Revenue office and many offices also supply the stamps. The stamps are obtainable from Somerset House or through a post office.

H. G. B. (26/1) has been in his present business just over three years, and on assessment of his business for each of the years he says the income-tax authorities have found it was entitled to exemption. Notwithstanding this, he has paid income-tax amounting to £7 in the first year and over £11 last year, but on what or under what circumstances he does not say. On asking for a form to claim repayment of these sums, this was not only refused, but a claim is made against him for £15 for income-tax for the current year. The authorities have even, it appears, made a demand on him for an instalment of last year's tax, which he says he has already paid. [The position is incomprehensible on the facts given. If "H. G. B." will send on particulars of his income for each of the years, so as to show what these charges were made on, whether trade profits, investments, or the like, a reply will be given.]

C. P. E. F. (9/2) says that in October last he received notice of an assessment to income-tax, probably based on figures obtained from his employer. The assessment was on his whole salary without allowance or deductions. He thereupon protested, and asked for a return form, which he filled up and sent in, claiming the deductions to which he thought himself entitled. Notwithstanding this, he has received two demand notes for tax based on the original assessment, and although he has made three formal applications in writing to be assessed in accordance with his return. He asks what is his position. [The action of the local inspector appears to have been high-handed and irregular, although "C. P. E. F." was also in fault when he first got the assessment in not giving the notice of appeal against it in the usual way within the time (twenty-one days) set out on the notice. At the same time, we think the inspector could well have accepted the return sent in as a notice of appeal, and adjusted the assessment accordingly. "C. P. E. F." ought to write to the Secretary (Taxes), The Commissioners of Inland Revenue, Somerset House, London, giving all the facts and asking that the local inspector should be instructed to make the necessary adjustment in the assessment.]

Velox (12/2) has received a visit from the police, who have inspected his Dangerous Drugs Act register and told him that it is not kept properly, suggesting that instead of a reference being made in the register to the prescription book he should copy the prescription in the register, and not in the prescription-book. It is suggested that the one entry in the D.D.A. register would be sufficient. [If you did not make the entry in the prescription-book you would be incurring a penalty under Section 17 of the Pharmacy Act, 1868. Exemption from the labelling of poisons (required by the first part of that section) when the poisons are dispensed is conditional, as follows:—

Provided such medicine be labelled in the manner aforesaid, with the name and address of the seller, and the ingredients thereof be entered, with the name of the person to whom it is sold or delivered, in a book to be kept by the seller for that purpose. You should inform the police that you are acting strictly in accordance with Regulation 9 (g) of the Dangerous Drugs Act, which is as follows:—

A person lawfully keeping open shop for the retailing of poisons in accordance with the provisions of the Pharmacy Act, 1868, as amended by the Poisons and Pharmacy Act, 1908, may, in lieu of keeping the register required by this Regulation of drugs sold or supplied by him, enter separately for each of the drugs in a book to be kept for the purpose references under the appropriate dates to the entries in the "Poisons Book" or "Prescription Book" kept by him in pursuance of Section 17 of the Pharmacy Act, 1868, relating to any supply of the drugs.

As we said last week, the Pharmacy Acts are of great importance to the public in preventing accidental poisoning, and chemists should see that the provisions of the Acts are carried out to the letter.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

J. K. Y. (30/25).—(1) THE MANUFACTURE OF HAT DYES is dealt with in "Pharmaceutical Formulas." (2) The books dealing with the manufacture of aniline dyes are numerous, but the processes cannot be carried out economically on a small scale. A recently published book ("The Colour Index") enumerates 1,230 aniline dyes and gives an outline of the processes of manufacture and the necessary references to the patents.

D. C. (14/1).—SOFTENING LEATHER.—The suppleness in leather required for glove manufacture is obtained by working egg-yolk into the leather. Grease is not permissible in this case unless diluted as in the egg-yolk by some inert matter. It is possible that castor oil in solution in alcohol would penetrate the leather quickly. You might experiment with this, working off excess of dressing by means of dry sawdust or bran.

H. A. (77/38).—GLYCERIN AND CUCUMBER CREAM.—

Curd soap	...	...	...	...	5ss.
Distilled water	...	...	...	...	5iss.
Cucumber pomade	...	...	...	...	5iij.
Glycerin	...	...	...	...	5j.
Perfume	...	...	...	...	a sufficiency
Water to	...	...	...	...	Oij.

Dissolve the soap in the water and mix well with the pomade previously melted in a large and hot mortar. Allow to stand twelve hours, then add the glycerin and perfume (ol. rose geran. mxx., ol. limonis mxx.), and gradually work in the rest of the water. Make up to 2 pints and strain.

Luxor (9/1).—(1) CLEANSING DRINK FOR COWS AFTER CALVING.—

I		II	
Pulv. ergotæ	... 5j.	Diapente	... 3viij.
Aloes Soc.	... 5l.	Pot. nitr.	... 3iv.
Pulv. zingib.	... 5j.	Pulv. carui.	... 3iv.
Pulv. curcumæ	... 5j.	Pulv. zingib.	... 3iv.
Mag. sulph.	... 3xij.	Mag. sulph.	... lb. iij.

To be given in a quart of hot ale or thin gruel within two hours after calving.

(2) GLYCERIN AND CUCUMBER CREAM.—See reply to "H. A."

S. M. (9/1).—(1) YELLOW COLOURING MATTERS.—The following are harmless aniline colours for use in beverages: Naphthol yellow S., tartrazine, yellow A.B., and yellow O.B. These are suitable for lemonade powder, but you may find one or other of the dyes more suited for your purpose. (2) LEMONADE POWDERS, SUGARLESS.—These are generally supplied, wrapped in the form of seidlitz powders, as follows:—

A		B	
Sodium bicarbonate	300 gr.	Tartaric acid (in powder)	... 350 gr.
Saccharin	... 4 gr.	Divide into twelve portions, wrapping each in white paper.	
Oil of lemon	... 15 m.		

Mix and divide into twelve portions, wrapping each in blue paper. When required for use dissolve the contents of the blue packet in a tumbler of water, add the acid powder and drink during effervescence. (3) SKIN CREAM FOR CHAPPED HANDS.—The following is a non-greasy form of hand cream:—

Powdered tragacanth	...	...	5ij.
Oil of rose geranium	...	...	mxv.
Rectified spirit	...	...	5ss.
Glycerin	...	...	5iij.
Water	...	...	5vj.

Dissolve the perfume in the spirit and add to the tragacanth contained in a mortar; mix well, then add all at once the glycerin and water previously mixed and stir until uniform.

A. O. (15/1).—(1) MANUFACTURE OF FINE CHEMICALS.—So far as we are aware, there is no book devoted to this subject, but the matter is dealt with in Thorpe's "Dictionary of Applied Chemistry." This is an expensive work which you could doubtless inspect at the local library before deciding whether it would suit your purpose. An article in the *C. & D. Diary*, 1916, dealt with the manufacture of synthetic chemicals which had been the subject of patents. (2) The *C. & D. "Dictionary of Synonyms"* is out of print at present. When the new edition is ready an announcement will be made in the *C. & D.*

R. H. (4/1).—BLUEING GUN BARRELS.—The two methods of doing this are by heat and by chemicals. In the former case the cleaned and polished steel is heated in wood-ashes to a temperature of from 500° to 600° F. The following are two ways of carrying out the blueing by the chemical method: (1) Apply liq. antim. chlor. to the hot gun barrel and rub the surface afterwards with a piece of green oak. (2) Immerse in the following solution:—

Lead acetate	...	...	50 gr.
Sodium thiosulphate	...	...	50 gr.
Water	...	...	5 oz.

The solution is used hot, the article to be coloured being completely immersed. A variety of colours is obtained, and so soon as the pale blue stage is reached the steel is taken out of the liquid and washed.

Rad. Rhei (5/2).—JABORANDI HAIR LOTION.—The following meets your requirements:

Glycerin of borax	...	...	5j.
Spirit of rosemary	...	...	5ss.
Tincture of jaborandi	...	...	5iiss.
Camphor water to	...	...	5viij.

Mix and filter through paper the surface of which has been prepared with kaolin.

A. M. (12/1).—BOILER-SCALE REMOVER.—This is a pale-yellow vegetable powder, of slightly astringent taste, yielding 10 per cent. of moisture and 9 per cent. of ash. It is probably spent sumach, a waste product of the tannery.

E. & K. (29/1).—HAIR DRESSING.—This is a clear spirituous preparation with only a very small layer of oil at the bottom, which on shaking is only a little less bright. The sp. gr. is 0.845, and it yields on evaporating 12.1 per cent. of an oil which is probably castor oil; it may, however, be a mixture of castor with olive or almond oil.

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," February 14, 1874
Politics in 1874

Our anticipations of last month as to Mr. Gladstone's intentions with regard to the income tax proved singularly accurate, as indicated in the address with which that minister soon afterwards startled the country. The somewhat surprising completeness of the Conservative victory in the late general election was achieved in spite of, and assuredly not in consequence of, the tempting financial programme which the Liberal Premier felt himself secure in promising. The skilfulness of Mr. Gladstone's scheme of vaguely publishing his financial intentions will hardly be fully realised until the details of his opponents' budget come to be announced. In whatever respect this may differ from what has been hinted at, especially if any remnant of the income tax be allowed to remain, dissatisfaction and disappointment is certain to result, now that the "happy thought" has once been officially published. Apart from all questions of election tactics, or of party politics, we can but regret that the Conservative triumph had not been delayed until the budget had been settled, so that we might have had the advantage once again of the services of a minister in a department in which he is acknowledged on both sides to be *facile princeps*. It is proverbially foolish, however, to mourn over spilt milk, and no Tory Chancellor of the Exchequer is likely to occasion more apprehension in commercial circles than has the ingenious gentleman who has filled that office for several years past.

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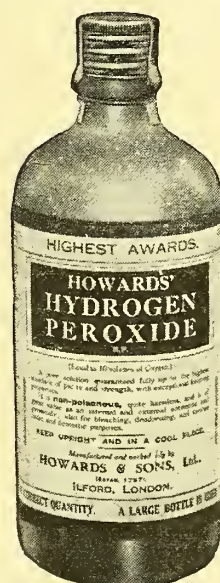
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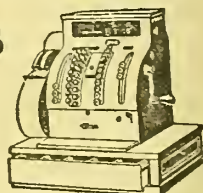
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Make HEADACHES help to fill your till-sell



CONSIDER "Daisy" from a thoroughly business-like point of view, the point of view you have *got* to have to be successful to-day—and you will see how wise you would be to push "Daisy" *hard*.

For "Daisy" yields you from 50 to 100 per cent. of clear profit; it is easy and quick to handle; the market is big and includes nearly everybody; and "Daisy" is advertised so heavily and so well that your every "headache" customer will accept it gladly.

Every day "Daisy" gets more and more users; more and more people learn how safe and how quickly effective it is. They are passing your window every hour. Let them see that *you* have "Daisy" and into your store they'll come.

Quick, easy, big-profit sales are what every chemist wants. "Daisy" offers them to you to-day. Will you take them?

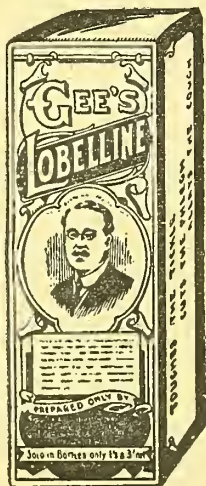
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1/- packets, each containing 8 powders—Minimum Retail price 1/-. Sample Powder 2d. For not less than 1 doz. boxes **9/9** per doz. For not less than 3 doz. boxes **9/2** per doz. 2/3 packets, each containing 20 powders—Minimum Retail price 2/3. For not less than 1 doz. boxes **21/6** per doz. For not less than 3 doz. boxes **20/6** per doz. Mixed orders for 1/-, 2/3, 6/- size and for "Daisy" Tablets on best terms. Discount $7\frac{1}{2}$ per cent. for cash. *Carriage Paid to destination.* From all Wholesalers or direct.

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1/3
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LOBELLINE**
The Great Lung Preserver

FOR COUGHS AND COLDS

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MENTHOL AND
LIQUORICE,

FOR

**VOICE AND
THROAT**



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Severe
Weather
this Winter,
so don't be out
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SMARTEST AND
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*Clears the
Skin*

Dr. BUCHANAN'S
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*Soothes, Heals
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Ophtha retails at 1/3 and 2/6 per
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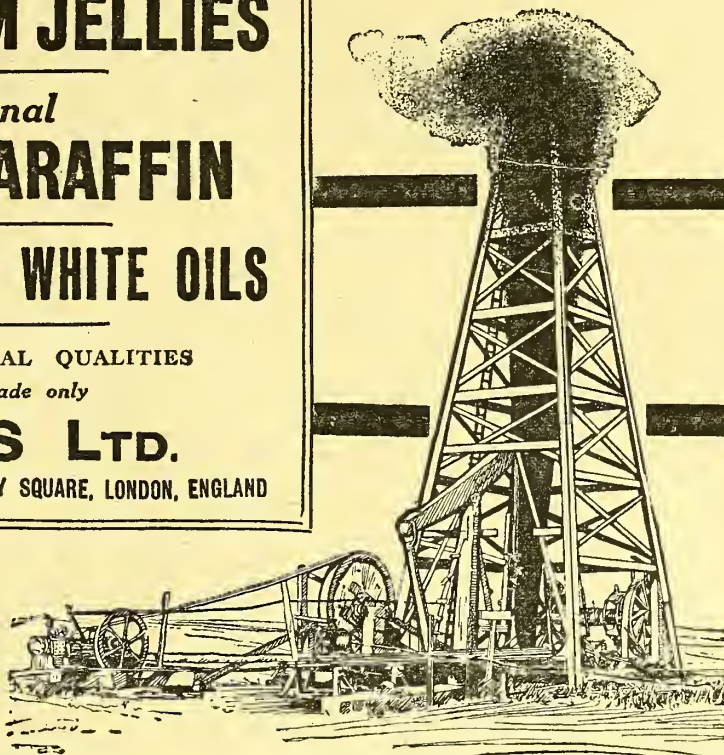
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*There is nobody so fastidious
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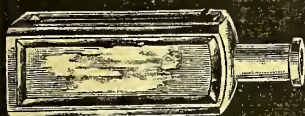
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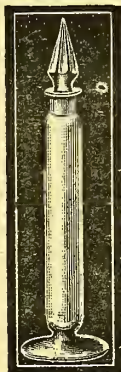
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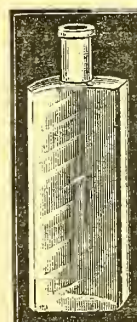
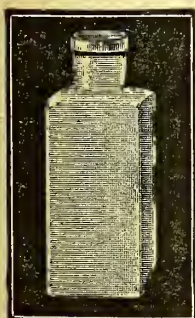
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THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.
LONDON E.C. 4

FEBRUARY 16, 1924

This Supplement is inserted in every copy of The Chemist & Druggist.

THE CHEMIST AND DRUGGIST SUPPLEMENT

REVISED ADVERTISEMENT TARIFF.

Businesses Wanted and for Disposal, Premises to Let, Goods for Sale, and Agencies—6/- for 50 words; every additional 10 words or less, 6d.
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All Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

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3.—CHELSEA.—Drug Stores; returning about £1,100 per annum under management; scope for increase with the addition of N.H.I. Dispensing; double-fronted shop; good working stock; stock and fixtures estimated at £400; price £485.

4.—LONDON, S.W.—General Retail and Dispensing Business, situate in growing district; returns, £16 weekly, increasing; gross profit, 40 per cent.; single-fronted lock-up shop, well fitted and stocked; Vendor estimates value of stock and fixtures at £550; to effect a speedy transfer, the sum of £450 would be accepted.

5.—LONDON, N.—General Retail Business, with N.H.I. Dispensing; established many years; returns average £70 weekly, with scope for large increase under personal supervision; gross profit, 40 per cent.; double-fronted shop, modern; held on lease, at pre-war rental; further details on application.

6.—LONDON, W.—General Retail and Dispensing Business, capable of extension, producing about £1,200 net profit per annum; modern front; long lease; further details will be furnished to applicants supplying banker's reference.

7.—HASTINGS (Near).—Dispensing and Photographic Business, in close proximity to all the Hotels; returns, £2,000 per annum, increasing; gross profit, 45 per cent.; large double-fronted shop, handsomely fitted and well stocked; held on long lease at a rental of £100 per ann.; further details on application.

8.—BANKS OF THE THAMES.—Death vacancy. General Retail and Photographic Business; established many years; returns approach £2,000 per annum, with net profit about

£500; large double-fronted shop, well fitted in mahogany and oak; good working stock, 8-roomed house, dark room, garden, private entrance; held on lease at moderate rental; price £1,350, or valuation terms entertained.

9.—BRIDGEND (Near).—Branch Business, carried on under unqualified management; General Retail, Wine Licence, and Kodak Agency; returns, £25 weekly, with scope for large extension; the shop is fitted in mahogany and well stocked; good house; small garden; entirely unopposed; price £750.

10.—CARLISLE (About 25 Miles from).—General Retail and Prescribing Business, with Kodak Agency; returns between £1,000 and £1,100, at good prices; excellent sale for own proprietaries; large double-fronted shop, well stocked; rent and rates, £29 per annum; nearest Chemist, 12 miles distant; population 3,500, with many villages around; price £550.

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14.—SOUTH-EAST COAST.—General Retail and Dispensing Business, with scope for large increase with the addition of Photographic; returns at the rate of £2,000 per annum; gross profit, 40 per cent.; double-fronted corner shop, fitted in oak and well stocked; long lease; price £1,150; part payment entertained from bona-fide applicants; at least two-thirds of purchase money required on entry.

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3.—**OXON**.—Good-class Market Town Business, with excellent living accommodation; returns, £1,280; new lease; very old-established; price £1,800. (92)

4.—**GLAMORGANSHIRE**.—Well-fitted Pharmacy, in busy centre, with scope for considerable increase; rent, 10s. per week; new lease to be arranged; returns average £20/25 per week; offers invited. (97)

5.—**YORKS**.—Sound Cash Business; turnover, £900 per annum; N.H.I. and Prescribing; living accommodation if required; very low rental; excellent opportunity for beginner, as there is undoubted scope for increasing trade; price £500. (95)

6.—**YORKS**.—Old-established Pharmacy, in important town; returns, about £25 per week; large shop and excellent house of 7 rooms, kitchen, 2 attics, etc.; in present hands 18 years; handsome mahogany fittings; price £1,200, all at, for quick sale. (99)

7.—**DURHAM**.—Dispensing Chemist; important town; established 50 years; returns, now £19 p.w.; could be doubled; stock about £225; low rental; possession of good house; price, for quick sale, £300; a good, sound business. (100)

STOCKTAKING.—Perhaps it is too much trouble or you have not the time to spare. Then why not consult the Practical Firm who will do this work for you for a small inclusive fee, without interference with your work? For full particulars write as above.

BAKER & ROBERTS

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Stock-taking Valuations at Special Terms personally conducted by
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AGENCIES.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

A.A.—YOUNG Chemist, opening Office in Manchester with view to travelling Lancashire, desires a few non conflicting Agencies, Specialities, and Sundries, etc., suitable to the Retail Chemist Trade. Reply, stating full particulars terms, etc., to "Salesman," 120/12, Office of this Paper.

AGENCY WANTED.—Wholesale Firm, having two Travellers calling on Chemists, is prepared to take up Agency for Cumberland and Westmorland for good selling Proprietaries and Packed Goods. Send full particulars to The H.T. Drug Co., Ltd., 35 New Lowther Street, Whitehaven.

AGENCY required, known Proprietaries or good, quick sellers, wanted by well-known and recommended Agent with first-class connections among Chemists, Hairdressers, and Lady Out-fitters North; offices and storage Leeds; nothing too big. Write offers now for real energetic services. Distributing Agency considered. 121/15, Office of this Paper.

ALL parts of England, Wales and Ireland.—Wanted, Agents or Representatives, with connection, to sell Medicinal Waters on commission along with their other lines. 58/254, Office of this Paper.

REPRESENTATIVE, experienced and in close personal touch with all Wholesale Buyers, Drug and allied trades, desires additional Agency on commission basis; London interview. P.C.B. 45/21, Office of this Paper.

WANTED, Selling Agencies for exclusive Toilet Novelties. Sadleir & Slinn, Chemists, Gloucester.

FOR SALE.

BAROGRAPH, Scot & Mason, £4 10s., cost £7 10s.; Gulliver Ophthalmoscope, electric, perfect, £3 10s.; X16 Prism Binoculars, new, £5, cost £10; Crystal Set and 2-valve Amplifier, new condition, cost £16, sell for £7 10s. Full particulars given. Apply 59/250 Office of this Paper.

PREMISES FOR SALE.

CRICKLEWOOD.—Will the Chemist in Cricklewood lately inquiring for a Shop in Radlett (where there is excellent opening for Chemist) communicate with Arthur Scott, Radlett?

BUSINESS Premises in commanding position in main street of Midland town; long lease offered to purchaser of stock, fittings, etc.; suit any trade; possession any time; particulars given and received in confidence. Apply 114/27, Office of this Paper.

PARTNERSHIPS.

BRITISH COLONY.—An active Partner is required to take up half-share in a sound, old-established Chemist's business in a progressive and healthy Colony; must be able to take over full control; good salary and half-share of net profits; price for half-share £4,500. Apply, Berdoo & Fish, Valuers, 41 Argyle Square, King's Cross, W.C.1.

BUSINESSES FOR DISPOSAL.

for 50 words or less; 6d. for every additional 10 words or less, prepaid.

BLACKPOOL.—Chemist and Sundries; finest part of town; main thoroughfare; fully stocked and equipped; smart shop; on rental basis; exceptional opportunity; principals only. Apply Weston & Bedford, 28 Abingdon Street.

BRIGHTON.—Chemist's; fine position; main road; lock-up shop; low rent; long lease; price, including about £300 odd stock, £800. Reason & Tickle, Auctioneers, Brighton.

MANCHESTER.—Old-established Business for quick sale; main thoroughfare; death of owner; average turnover last 5 years £1,539; excellent profits; could be greatly increased by energetic man; several Proprietaries included; house vacant possession; lease could be arranged. Apply "G. N. M.," 56 Lanover Street, Liverpool.

MANCHESTER (near).—Choice of two old-established Chemists' Businesses; splendid positions; thickly populated working-class districts; double-fronted; moderately fitted; well stocked; somewhat neglected, but capable of great expansion all ranches; price £650 and £1,250; property (vendor's own) will ease or sell. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

MIDLANDS.—Old-established Drug and Grocery Business, returns £2,700, for Sale; good house and premises on ease, or will sell; plenty of scope for increase; vendor is retiring, and would be willing to assist buyer in any way; price £1,250. "Midlands," 39/259, Office of this Paper.

SOUTH COAST (popular seaside resort).—Sound established Dispensing and Family Business; main thoroughfare; well fitted, stocked, and good living accommodation; returns £3,500 yearly, showing net profit £1,000 (auditor's figures); price £2,800. Also similar Business, Bournemouth; net profit £750 yearly; price £1,750. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

SOUTH WALES.—Mining district. Chemist's Business; Wine Licence, Kodak, etc.; under unqualified; excellent opportunity for qualified man; large shop; good house; moderate rent; capital required £750-£800. Further particulars to genuine inquiries only. Apply "M.P.S.," 100/27, Office of this Paper.

YORKSHIRE, WEST RIDING.—Business in thickly-populated working-class district; good Prescribing, also N.H.I., which could be increased; would suit energetic Chemist; compact shop, two windows, and good house at reasonable rent; price £650, or nearest offer for quick sale. Full particulars to bona-fide applicants. 116/17, Office of this Paper.

DEATH vacancy; Thames Valley; well-fitted shop; under unqualified widow at present; doing £1,400; qualified man would double with N.H.I. and Photographic; price for quick sale, £1,150. Apply 117/38, Office of this Paper.

DRUG Stores, with Property; double-fronted shop, with electric light; good living accommodation; well fitted and stocked; or would suit qualified man. 65 Rochdale Road, Bury, Lancs.

FOR Disposal.—Mixed Country Business; healthy village in Salop; population exceeds 2,000; no opposition 8 miles; returns over £1,200; excellent prices; N.H.I., 150 month; all Dispensing local doctor; electric light, modern windows, good fixtures; over 6 years' lease; rent £35; price £899 cash; immediate transfer. 121/18, Office of this Paper.

FOR Sale, owing to death of active partner, a Proprietary Article with established reputation and sale in West of England; Secret Recipe could be handed over to or goods manufactured for purchaser. Particulars of Ernest J. White & Co., Solicitors, Bath.

GENUINE good-class Cash Drug Store for Sale in populous and growing London suburb; present hands over five years; no risk; big profits and scope; doing at present nearly £1,000 per annum; books kept; nicely fitted and stocked; convenient house attached; lease obtainable at moderate rental and rates; perfectly sound reason for disposal. "Havealook," 118/11, Office of this Paper.

RENT free; suit single gentleman; easily-worked Cash Retail, taking about £50 weekly; Kodak Agency; electric light; double-fronted, well-stocked Pharmacy; Surrey main line town; room behind shop let to Dentist, which, with residential part sub-let, pays rent; lease 10 years to run; price £950 cash. 119/36, Office of this Paper.

SPLENDID opportunity occurs in S.W. district for an energetic Pharmacist to purchase first-class Business by instalments; initial outlay can be half agreed purchase price; Pharmacy fully stocked ready to take over without extra outlay; turnover last year £3,500; lease 18 years; no agents. Apply 118/7, Office of this Paper.

£550, ALL AT.—Returns £800 per annum; suit young qualified or unqualified; well-stocked, compact Pharmacy; pleasant South Coast resort; lock-up shop, or purchase of freehold with vacant possession; owner retiring. 116/33, Office of this Paper.

BUSINESSES WANTED.

CASH at command £1,000.—Chemist wishes to purchase Business; living accommodation essential; neglected one not objected to if scope for increase; Eastern Counties preferred; Managership with definite arrangement for succession entertained. Particulars, in strict confidence, to 121/14, Office of this Paper.

PHARMACIST desires to purchase a sound and established Business in the Midlands (West Midlands preferred); living accommodation and lease essential; town or country; Business must stand every investigation and offer comfortable living; turnover, £25-£30 weekly; can wait, if necessary; usual particulars in strictest confidence; references and cash ready. 120/3, Office of this Paper.

SITUATIONS OPEN.

[HOME.]

RETAIL.

AYLESBURY.—Smart, capable, unqualified Assistant wanted, quick and accurate Dispenser; Stock and occasional Counter. Apply, stating age, salary and references, to F. J. Janes, Kingsbury Square, Aylesbury.

BRADFORD.—Young lady Assistant for good-class Drug Store; smart Saleswoman, with good knowledge of Drug Trade, Toilet lines, etc.; no Dispensing; not necessarily qualified if competent. State experience, salary required, photo (returnable) to 117/28, Office of this Paper.

BRIGHTON.—Unqualified Assistant; must be quick and accurate Dispenser and used to Counter work. Experience, age, salary, etc., in first letter to Jeeves, 88 St. George's Road, Brighton.

COVENTRY.—Unqualified Assistant required; must be smart and energetic, with thorough knowledge of Photography, including D. & P. Give age, experience, salary, etc., to 116/34, Office of this Paper.

CROYDON.—A vacancy occurs for a reliable and smart Junior Assistant; good Dispensing experience necessary; knowledge of Photography and Window-dressing. Full particulars with application, but no photo or references. 39/255, Office of this Paper.

EAST YORKS.—Busy seaport; capable qualified Manager for business in main thoroughfare; quick Cash, with Photographic. "York," 119/38, Office of this Paper.

FLEET.—Unqualified Assistant for good-class Dispensing and Retail; good up-to-date Window-dresser. Apply, stating age, salary, references, and enclose photo, Allen & Lloyd, Aldershot.

KINGSTON-ON-THAMES.—Assistant wanted for quick Counter business, Dispensing, Toilet and Photographic; must be first-class Counterman, energetic and willing. State age, height, experience, and salary required. Applications not answered in four days courteously declined. Tamplin & Son, 19 Eden Street, Kingston.

LEEDS.—Young (about 22 years) qualified Assistant required immediately for busy shop in City; state full particulars and salary in first letter; excellent opportunities for commercial experience. 39/256, Office of this Paper.

LEICESTER.—Qualified Junior Assistant for Dispensing and Counter; accurate Dispenser. Please state age, salary required, and references. Hearnshaw, 49 Welford Road.

LONDON HOSPITAL, WHITECHAPEL, E.—Temporary Dispenser required immediately; Pharmaceutical Society's qualification essential; age not over 35 years; salary at the rate of £200 a year. Apply personally, between 10 and 12 a.m. or 2 and 4 p.m., to the Pharmacist.

LONDON.—Unqualified Assistant; must have good N.H.I. Dispensing experience. "London," 119/380, Office of this Paper.

LONDON, S.E.—Wanted in a Retail Prescribing business, with some N.H.I. Dispensing, a qualified Assistant, to take charge during absence of Proprietor; suit an elderly, active man. Apply, with references and salary required (outdoors), to "Chemist," No. 9 The Village, Old Charlton, S.E.7.

LONDON, S.W.—Counter Assistant, male, required with good experience in large Retail establishment; hours of work approximately 8.45 a.m. to 6.15 p.m., Saturdays to 1 p.m. Please state age, experience, and salary required. Personal interview necessary. Write first instance, Box 982, Sells, Fleet Street, E.C.4.

LONDON, CENTRAL.—Outdoors; Assistant, not under 25, speaking French, with Continental experience; must also have had good all-round English experience; could wait 2 or 3 weeks for suitable man. Write, with full particulars of experience, etc., to 121/39, Office of this Paper.

MANCHESTER.—An unqualified, gentlemanly Assistant required for the Retail Counter of a high-class City business; must be experienced Counterman. State fully experience, age, and salary expected. 118/17, Office of this Paper.

NEWCASTLE.—Experienced Assistant required for good-class business; knowledge of Photography; easy hours; no Insurance work; must be quick, reliable and accurate; age about 30; not necessarily qualified. Please give fullest particulars in first letter, stating salary required. Apply "Chemist," c/o 130 Manor House Road, Newcastle-upon-Tyne.

NEWCASTLE-UPON-TYNE.—Qualified Assistant (male) of good address required, with high-class Retail and Dispensing experience; knowledge of Photography an advantage. Apply, with full particulars of experience, age and salary required (outdoors), references, when disengaged, to Brady & Martin, Ltd., 29 Mosley Street, Newcastle-upon-Tyne.

NORTHAMPTON.—Unqualified Assistant required; must be a good Counterman and up-to-date Window-dresser. Apply, stating salary and giving references, to Burnett, Chemist, Northampton.

NORTH OF ENGLAND.—Assistant required for Agricultural and good-class Family business; Dispenser, Window-dresser, Optics, smart Counterman. Apply, with references, as to salary, qualifications, etc., to 120/18, Office of this Paper. Applications not answered within a week respectfully declined.

SHEFFIELD.—Assistant (male) for Light Retail, Photographic and heavy N.H.I. Business; immediately; no copies of references, please. Applications not answered within a week declined with thanks. 120/16, Office of this Paper.

SOUTHEND-ON-SEA.—Two qualified Assistants required, one elderly (would suit) for relief work; also a capable Manager, able to undertake Optical work, in which he could have a permanent interest. Apply Noble's, 84 Southchurch Road, Southend-on-Sea, Essex.

S.W. LONDON.—Experienced, unqualified Assistant required, chiefly for Dispensing; age 25-40; outdoors; must be careful Dispenser and tactful Salesman. Please give full particulars and salary required to 119/26, Office of this Paper. Applications not answered in 7 days declined with thanks.

TORQUAY.—Improver or Junior required immediately (gentleman), age 18-20, for high-class Retail and Dispensing business (outdoor). Apply, stating age, height, experience, and salary required, to H. F. Bourne, 11 Strand, Torquay.

WEST OF ENGLAND.—A capable lady required to take charge of the Velox Printing Department; must be experienced in the modern methods, and be prepared to train other young ladies; good salary. 118/22, Office of this Paper.

YORKSHIRE.—Qualified man, 28 to 30 years old, for quick, working-class business; Photography. Full particulars in first letter to 121/24, Office of this Paper.

A QUALIFIED Assistant wanted as Senior Dispenser; salary £5 per week. Apply in first instance by letter, stating age, height, and particulars as to previous engagements. D. P. Roberts, Chemist, Poplar Walk, Croydon.

A QUALIFIED Assistant to take charge of Dispensing (above shop); will be expected to do the Dispensing, with assistance, manufacture of own preparations, galenicals, and the usual Dispensary work, also a little book-keeping; rarely, if ever, required in shop; must be used to really good-class Dispensing; there is work for the whole day long, so applicants must not expect an easy sit., but it is comfortable and every consideration given. Letters only, in first instance, stating age, salary, etc., Prebble, Chemist, 187 Kensington, Liverpool.

A QUALIFIED Manager required for Retail and Dispensing Business in South-east London; knowledge of Photography essential. Apply, giving full particulars of experience, age and salary required. Applications not answered in 7 days respectfully declined. 120/19, Office of this Paper.

ASSISTANT wanted; unqualified; outdoors; General, Family and Dispensing business. Horace Wright, Chaudes Pharmacy, Edgware, Middlesex.

BRANCH Manager required for good middle-class business, London suburb (outdoors); excellent prospects for energetic man. Apply, giving full particulars of experience, to "K. R.," 39/262, Office of this Paper.

CHEMIST-OPTICIAN required shortly as Manager of good middle-class Retail and Photographic business; outdoors Apply, with full particulars, to A. Goldthorpe, Chemist, 11 Plumstead High Street, S.E.18.

COMPETENT qualified man, over 30, early in March, to take charge of quick Cash business; good all-round experience essential. Apply by letter, with usual full particulars, Milne Chemist, Greenwich, London, S.E.

DISPENSER wanted by London Doctor for morning and evening work; one able to make simple stocks and able to keep panel record cards preferred. State age, experience, an salary required, give, but do not send, references, to 120/31 Office of this Paper.

DISPENSING Chemist (woman, single or widowed) required at the Manor, Epsom, Surrey (L.C.C. Institution for the Mentally Defective—1,000 cases); must have qualification of the Royal Pharmaceutical Society, and be practical Photographer; age not to exceed 40; salary, £125, rising to £185 a year, with temporary additions (at present) to meet cost of living; total pay at commencing rate, £205 a year; pensionable. Full particulars on form obtainable from Chief Officer Mental Hospitals Department, L.C.C. County Hall, Westminster Bridge, S.E.1. Mark inquiries "Manor—Dispenser," and send stamped addressed foolscap envelope. Applications by 11 a.m. on Monday, February 25, 1924. Canvassing disqualifies.

HALL CERTIFICATE.—Young lady with good Counter experience required as Dispenser for Rye Lane, Peckham. Apply in writing to "E. H.," Parke's Drug Stores, Ltd., 65 Harmond Street, Chalk Farm, N.W.1.

JUNIOR Assistant wanted, age 20 to 25; one accustomed to Photographic trade. State references and salary required. Apply "Chemist," 261 Dewsbury Road, Leeds.

JUNIOR Assistant wanted (male) about the first week in March, of good appearance, for high-class Retail and Dispensing business, Photography. State salary (outdoors) and enclose photograph, to H. R. Browne, 1 Cornfield Road, Eastbourne.

JUNIOR, unqualified, about 23, practical and well educated, knowledge of Dispensing and Photography essential, for high-class Pharmacy. State salary (outdoors), and give references, no reply in 5 days declined.—120/7, Office of this Paper.

MESSRS. COOPER, SON & CO., LTD., require immediately qualified Assistants; previous West-End experience an advantage, though not essential; applicants must have good knowledge of Dispensing, and be of gentlemanly appearance. Apply, with full particulars, stating age, salary, etc., to "A. J. B. C.," 24 Sloane Street, London, S.W.1.

QUALIFIED Manager required for up-to-date Cash Pharmacy; must be good Salesman and Window-dresser, and able to increase turnover; house accommodation available. State full particulars, age, height, experience, when disengaged, and salary required, in first letter, to Taylor & Co., 75 West Street, Brighton.

QUALIFIED Manager required for London district; must be thoroughly experienced and absolutely reliable. Please state age, height, salary, experience, etc., to 39/254, Office of this Paper.

QUALIFIED Assistant, to commence duty in March, for brisk Retail and Dispensing business (County Durham branch); must be quick and accurate, good Counterman and Window-dresser, and have experience of Photographic trade. Apply by letter, furnishing recent references, stating age, qualification, salary, etc., in first letter. Mason & Co., Ltd., 80 King Street, South Shields.

QUALIFIED Manager required at once for medium-class business; good prospects to the right man; also smart, unqualified Assistant. Apply 3 Ridgmount Street, Tottenham Court Road, W.C.1.

QUALIFIED lady or male Assistant, 30, having had long and varied experience in good-class mixed business, for West Riding; must be able to dress windows well; knowledge of Photography. Photo and fullest particulars and salary required first letter. "Statim," 121/27, Office of this Paper.

REGISTERED Chemist, temporarily (possibly permanent) required immediately for small Company shop; easy and comfortable berth. Reply, in first instance, by letter, giving full particulars and salary required, no fancy prices, Donnelly, 230 Halliwell Road, Bolton.

RELIABLE, young, unqualified Junior wanted for the Dispensing, Counter and Photographic business. Send fullest particulars of experience, salary required, and enclose photo, Druce & Co., Pharmacists, 118 High Street, Oxford.

RELIABLE young Assistant for Cash, N.H.I. Dispensing and Photographic business. Kindly state age, experience, and salary (outdoor) to "Southern," 120/35, Office of this Paper.

RT Assistant for West Country Wholesale; good prospects for keen, accurate and industrious young man with good knowledge of Chemist's Retail or Wholesale trade. State age, height, full experience, and salary to 39/261, Office of this Paper.

QUALIFIED Assistant required; single; not under 26; easy hours; good Dispensing and all-round experience. 39, Office of this Paper.

VACANCY occurs for lady Dispenser, capable, willing to undertake Book-keeping, etc., to Doctor. State qualification, age, and full particulars to "South," 120/350, Office of this Paper.

WANTED, a keen and reliable Assistant, qualified preferred, though not essential, for good-class Family business with retail trade; must have a knowledge of Photography; progression for suitable man; state salary required. Shawyer, 12, M. Street, Swindon.

WANTED, shortly, an Assistant, about 25; must be a clean and accurate Dispenser and have a good knowledge of retail work; the post is a permanency for a suitable applicant who should have had an indentured apprenticeship. Please state salary required, age, height, experience, etc., E. Millard, New Road, Gravesend.

WANTED for March 1, qualified Assistant accustomed to high-class Dispensing; quick and reliable; South Coast. C. H., 121/3, Office of this Paper.

WANTED, as soon as possible, qualified Assistant; must have had first-class experience, good Counterman and Dispenser. Apply, stating salary and all particulars, to F. Wimshurst, 101st, Devonshire Road, Bexhill-on-Sea.

WANTED ladies required, with good experience in Retail Pharmacy, for Clerical work in London; interview would be necessary. Reply 118/12, Office of this Paper.

WANTED unqualified Assistant required immediately; busy Insurance Dispensing and Counter. State full particulars in first letter. Edward L. Lea, 196 Manchester Road, Werneth, Lancs.

WHOLESALE.

For 40 words or less; 6d. for every additional 10 words or less, prepaid.

IRELAND.—Young qualified Irish Pharmacist required as Representative by a well-known London house to call upon local men, Chemists, etc.; previous travelling experience not necessary, but preference given to one having both British and Irish Pharmaceutical experience. Give full particulars of previous experience, salary required, and, if possible, enclose a recent photo. 39/249, Office of this Paper.

VACANCY occurs in a well-known Speciality Firm for a young man of good appearance as a Representative for the London; must be a convincing Salesman. Applicants should state age, experience (if any), and remuneration expected. Box c/o C. Vernon & Sons, Ltd., 38 Holborn Viaduct, E.C.1.

ADVERTISEMENT Copy Writer.—London Wholesale Chemists require Assistant Copy Writer in Advertising Department; pharmaceutical experience essential. Replies must state age, experience, and salary required. 39/245, Office of this Paper.

CHEMIST, qualified or otherwise, either sex, thoroughly experienced in manufacture of Galenicals, etc., required immediately, temporarily (possibly permanently) by small firm in London. State experience, salary, etc., names and kinds of goods experienced in. 112/24, Office of this Paper.

MANUFACTURING Chemist wanted, to prepare and distribute to the trade a Proprietary Medicine (liquid). State name and what security would be given to keep the formula secret. Apply P.C.B., 45/14, Office of this Paper.

REPRESENTATIVE required, calling on Country Chemists for well-known Rat Poison and Nursery Pomade; a good line for right man; particulars in confidence; commission 5%. P.C.B. 44/39, Office of this Paper.

REPRESENTATIVES calling on Chemists to offer quick selling novelty; liberal commission. 39/252, Office of this Paper.

REPRESENTATIVES calling on Medical men to sell two first-class Pharmaceutical Specialities; liberal commission. 253, Office of this Paper.

REPRESENTATIVE (whole time) required for London, chiefly the south side, salary and expenses basis, to represent manufacturers of two well-known Proprietary products, soliciting orders, arranging for Window Displays and other propaganda. Replies, stating age and giving full details of previous experience, should be addressed to 39/258, Office of this Paper.

PHOTOGRAPHS, TESTIMONIALS, &c.

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS: As can be readily understood, when an advertiser receives from 60 to 100 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

REPRESENTATIVE for Lancashire and one for Yorkshire already calling on Chemists, on commission or commission and part expenses, to sell Drugs and Packed Goods. Full particulars, age, experience, also ground covered and lines carried, Platt, 178 Upper Brook Street, C-on-M., Manchester.

REPRESENTATIVES are required by an old-established Midland House for the following territories: London, South Coast and West Country, Ireland, Scotland and Wales; gentlemen capable of selling high-class products "own name," and proprietary, are invited to reply. 121/21, Office of this Paper.

REQUIRED for Essence Manufacturing Laboratory, Junior Pharmacist, able to compound and blend under supervision. Apply, stating age, previous and present positions, and salary required, to White, Tomkins & Courage, Ltd., North Albert Works, Reigate, Surrey.

REQUIRED, practical Manufacturer of Bismuth Salts, Iodides and Citrates. Apply P.C.B., 45/19, Office of this Paper.

SMART Assistant for West Country Wholesale; good prospects for keen, accurate and industrious young man with good experience of Chemist's Retail or Wholesale trade. State age, height, full experience, and salary to 39/261, Office of this Paper.

TRAVELLERS, with good connection amongst Chemists and Stores, are required in various districts throughout England and Wales, by large manufacturers who are increasing their sales staff, to handle a well-advertised Food Product. Please state firms already representing, what class of goods carried, and what area covered. Good commission will be paid, and the proposition offers opportunities of a large turnover. Full particulars, which will be treated in confidence, to 39/251, Office of this Paper.

WANTED, by progressive firm of Manufacturing Chemists near London, qualified Pharmacist to take charge of Manufacturing Galenicals, Packed Goods, Toilets, etc.; recent manufacturing experience essential. Write, stating salary required, to 39/260, Office of this Paper.

£700 PER ANNUM.—Druggists' Sundries. Multiple firm, about to open a number of branches, requires the services of a competent Buyer; must be able to obtain lowest manufacturing prices. No application entertained unless previous experience of buying for a number of branches. Replies, which should not include testimonials, will be treated in strictest confidence. 39/247, Office of this Paper.

£800 PER ANNUM.—Multiple firm requires services of capable Buyer for Patents and Proprietary Articles. Must be experienced in obtaining from manufacturers the lowest wholesale prices ruling. No application will be entertained from anyone who has not purchased similar lines for a number of branches. All replies will be treated in strictest confidence, and no testimonials should be sent unless requested. 39/246, Office of this Paper.

[COLONIAL, INDIAN AND FOREIGN.]

OSTEND (BELGIUM).—Qualified English Assistant (speaking a little French) wanted for the summer season from June 15 to September 15. Write, with references, to Monsieur A. Bouchery, Pharmacien du Roi, 7 Square Marie-José, Ostend.

RHODESIA.—Wanted, for healthy town, qualified Junior Assistant; must have had good Dispensing experience and have some knowledge of Photography. Commencing salary £25 per month; second-class passage paid out; three years' agreement. Apply, with photograph and copies of testimonials, to P.C.B. 44/38, Office of this Paper.

AN old-established Firm in the Far East have vacancy in their Wholesale Department for unqualified Assistant; age 25 to 30; at least five years' experience essential; must be used to keeping stock books and have thorough knowledge of handling Drugs and Chemicals, Druggists' Sundries and Patents; four years' agreement; passage paid out and home. Apply "Ware-house," 39/257, Office of this Paper.

CHEMIST; Dispensing, qualified, age 22-25, single, required for first-class British Firm in the East; liberal salary and allowance to smart man with good-class Retail, Dispensing and Counter experience; four years' agreement; passage paid. Write, stating full details of experience and present salary, to Box E. 151, Willing's, 119 Moorgate, E.C.2.

SITUATIONS WANTED.

RETAIL.

[HOME.]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A.A.A.—UNQUALIFIED, 30; experienced all branches; knowledge of Photography. "Statim," 133 Wendover Road, Aylesbury, Bucks.

A.A.—QUALIFIED, 25; single; experienced in all branches (one not afraid of work); Assistant or Manager; salary £3 15s. E. Goodwin, c/o Mrs. Tyrer, Monia Terrace, Alsager, Cheshire.

A.A.—QUALIFIED; experienced in all branches; smart appearance; Manager or Assistant; Photography; knowledge of Optics; London preferred. 119/29, Office of this Paper.

A.A.—QUALIFIED, tall, young, desires change; Manager or Assistant; London; excellent experience and references; energetic and willing. 120/28, Office of this Paper.

A HALL qualified woman seeks post; experienced; responsible; very moderate salary. "Dispenser," 41 Great Ormond Street, W.C.1.

A.—PERMANENCY desired where 20 years' all-round London and provincial experience is required; disengaged March; tall; single; well recommended in all branches of Pharmacy. 121/36, Office of this Paper.

ADVERTISER, 20, desires further Dispensing experience in large establishment; Bath, Bournemouth or London (West); progressive situation. 120/5, Office of this Paper.

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AS Locum; disengaged; excellent references and experience; booking forward. "Chemist," c/o 202 Lewisham Road, S.E.

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ASSISTANT; unqualified; 10 years' experience; excellent references. H. Giles, 5 Leamington Road, Southend-on-Sea.

ASSISTANT; tall; 7 years' good, all-round experience; Manchester or near. "Statim," 36 Muslin Street, Newton, Hyde, Cheshire.

ASSISTANT (lady); 30; highly recommended present employer; Counter, Window-dresser, and Packer; S.W. London preferred. 117/380, Office of this Paper.

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PART-TIME situation required; unqualified; good references; evenings; Saturday afternoon if required. "Radix," 1 Techmore Road, Battersea Park, S.W.11.

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PHARMACIST, 25, desires change; North of England preferred; London experience; good references. Breckon, 37 Hamilton Gardens, London, N.W.8.

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UNQUALIFIED, age 22; 7 years' good-class Retail, Dispensing and Photographic experience; quick and accurate; conscientious and willing worker; prize Window-dresser; shortly disengaged. Scorey, 68 Lancaster Road, Great Yarmouth.

UNQUALIFIED, 34, as Senior or Manager; tall; married; thoroughly experienced all branches; permanency. 121/37, Office of this Paper.

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